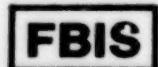


JPRS 75154

19 February 1980

Japan Report

No. 92



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REPORT DOCUMENTATION PAGE		1. REPORT NO. JPRS 75154	2.	3. Recipient's Accession No.
4. Title and Subtitle JAPAN REPORT, No. 92			5. Report Date 19 February 1980	
7. Author(s)			6.	
9. Performing Organization Name and Address Joint Publications Research Service 1000 North Glebe Road Arlington, Virginia 22201			8. Performing Organization Rept. No.	
12. Sponsoring Organization Name and Address As above			10. Project/Task/Work Unit No.	
			11. Contract(C) or Grant(G) No. (C) (G)	
15. Supplementary Notes			13. Type of Report & Period Covered	
			14.	
16. Abstract (Limit 200 words) This serial report contains press and radio coverage on political, sociological, economic, military, and scientific and technological developments.				
17. Document Analysis a. Descriptors JAPAN Political Sociological Military Economic Science and Technology b. Identifiers/Open-Ended Terms c. COSATI Field/Group 5C, 5D, 5K, 15C, 16D, 18I, 19F, 22B				
18. Availability Statement Unlimited Availability Sold by NTIS Springfield, Virginia 22161		19. Security Class (This Report) UNCLASSIFIED		21. No. of Pages 76
		20. Security Class (This Page) UNCLASSIFIED		22. Price

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JAPAN REPORT

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POLITICAL AND SOCIOLOGICAL

JAPANESE ECONOMIC COMMITTEE URGES CHANGES FOR DECADE

OW190427 Tokyo KYODO in English 0342 GMT 19 Jan 80 OW

[Text] Tokyo Jan 19 KYODO--Japan will need to change course in the 1980s and build "a new kind of order" in its economy, national defense, and more basically in its political system, according to a forum of the nation's business leaders.

The Japan Committee for Economic Development (Keizai Doyu Kai) published this opinion Friday in its annual expression of views on politics and the economy.

The committee predicted that the coming decade will be filled with "much greater confusion" on the world scene than the last decade and urged a national effort to make Japan more adaptable to "the greatest change imaginable."

In general, it urged (1) effective measures to assure national energy supplies; (2) restructuring Japanese industry to highly sophisticated, technology-centered types; (3) effective control of inflation, and (4) very active international cooperation.

For inflation control, the committee prescribed "a new supply and demand control policy to foster industrial capital spending and stabilize the long-term supply-demand balance," which it contrasted with a short-range present policy of controlling demand only.

The committee specified the international cooperation it had in mind as opening the Japanese market and industries wider to international cooperation through liberalization of agricultural and industrial imports and other means.

Japan's already important position in the world economy demands that it play "a positive international role to prove its trustworthiness" befitting its position, the Keizai Doyu Kai emphasized, adding that this also has "much to do with guaranteeing Japan's security as a whole."

The committee said this country should seek multinational cooperation and partnership with many friendly countries.

Concerning the nation's military defense, it called for nationwide public debates of all sorts to create "a new consensus."

Politically, "a new kind of order" was urged through several radical reforms, including creation of an American presidential-style aid system to strengthen the prime minister's leadership by providing the advice of intellectuals responsible only to him, rather than only that available from governmental bureaucrats.

A thoroughgoing review of Japan's election system was also recommended, plus a more flexible system of national administration, again through the appointment of private intellectuals to key posts.

CSO: 4120

POLITICAL AND SOCIOLOGICAL

SOHYO TO THROW DIET SUPPORT TO JSP FOR SUMMER ELECTION

OW290603 Tokyo KYODO in English 0547 GMT 29 Jan 80 OW

[Text] Tokyo Jan 29 KYODO--The General Council of Trade Unions (Sohyo) gave its full support to the Japan Socialist Party Tuesday for the House of Councillors election scheduled in the summer.

Sohyo also announced its understanding of the agreement recently reached between the JSP and Komeito on forming a coalition government in the event the ruling Liberal-Democratic Party is driven out of power.

Sohyo's support for the country's No 1 opposition party was given at a meeting Tuesday morning between leaders of the Labor Federation and JSP. The leaders included JSP Chairman Ichio Asukata and Sohyo Chairman Motofumi Makieda.

The two sides agreed to establish a 'cooperative committee on struggle for the House of Councillors election' on February 5 to work on Sohyo's cooperation in the upcoming election.

They also decided to keep the 'JSP-Komeito axis' in pushing ahead with a struggle in the Diet and the annual spring labor offensive.

They said the two opposition parties, under terms agreed earlier, will fight the government in the Diet 'with a view to protect the people's livelihood and reconstruct the Japanese economy.'

In the annual spring offensive, Sohyo and the JSP will carry out a 'strong struggle' in and out of the Diet to prevent the government's plan to delay eligibility for social security payments until age 65 and that they will fight against increases in public utility rates.

CSO: 4120

POLITICAL AND SOCIOLOGICAL

'HOT LINES' TO BE BUILT FOR NUCLEAR DISASTER PREVENTION MEASURES

Tokyo KYODO in English no time given 20 Jan 80 OW

[Text] Tokyo, 20 Jan (KYODO)--The government will start the installation of "hot lines" for emergency liaison purposes to link central nuclear administration agencies with local authorities and nuclear reactor operators this April.

The step is one of the nuclear disaster prevention measures proposed by a government advisory body after the Three Mile Island nuclear power station of the U.S. developed an accident in March last year.

The International Trade and Industry Ministry and Science and Technology Agency plan to lay direct telephone and high-speed facsimile lines linking them with the central control rooms of 14 nuclear power plants throughout the nation.

Similar lines with seven prefectural governments and 38 local autonomous bodies where nuclear reactors are located are also planned for completion by this fall.

Yen 220 million has already been set aside in the fiscal 1980 budget for the project.

The ministry and agency intend to build similar hot lines in nuclear power facilities to be constructed in the future, and their authorities.

CSO: 4120

POLITICAL AND SOCIOLOGICAL

COUNTRY'S RED ARMY RANSOM MONEY TURNS UP IN BOMBAY

OW300835 Tokyo KYODO in English 0758 GMT 30 Jan 80 PW

[Text] Tokyo Jan 30 KYODO--Part of the dollar 6 million ransom paid to ultra-leftist hijackers in 1977 in exchange for the release of 137 hostages surfaced in Bombay indicating that the money was used either by the Japan Red Army or its foreign allies, police said Wednesday.

Authorities said several persons, including some Japanese, spent a few hundred dollars in several places in Bombay in May last year.

A check on the serial numbers showed the money was part of the dollar 6 million ransom the Japanese Government paid to five Japan Red Army hijackers of the Japan Air Lines jetliner with 137 persons which they seized after it left Bombay for Tokyo in September 1977.

Authorities said the information came from Indian security officials.

They said a Japanese national also mailed out of Bombay in May last year Japan Red Army printed material to Japan but it was not known whether this person was connected with the group which allegedly spent the ransom.

The National Police Agency last year sought cooperation of law enforcement officials in various countries as the Japan Red Army issued statements threatening to "crush the Tokyo summit" of industrially advanced nations.

One of the five hijackers was later identified as Osamu Maruoka, a ranking member of the Japan Red Army. The hijackers freed the hostages at Dacca, Bangladesh, after they received the ransom and six persons freed from Japanese jail.

It was reported earlier that the ransom had not gone to Red Army members living abroad. But reports that part of the ransom had surfaced in India indicated that the money apparently had gone to Red Army members, according to authorities.

One of the most wanted Red Army leaders now in foreign countries is Miss Fusako Shigenobu, who earlier was reported to have been in Lebanon and had close contact with radical Palestinian groups.

Police said they have asked authorities in Middle Eastern and European countries to be on the lookout for possible appearance of the ransom money in the future.

POLITICAL AND SOCIOLOGICAL

OCEAN EXPLORATION COUNCIL PRESENTS PROPOSALS TO OHIRA

OW221051 Tokyo KYODO in English 1024 GMT 22 Jan 80 OW

[Text] Tokyo, 22 Jan (KYODO)--The Ocean Exploration Council recommended to the prime minister Tuesday that Japan adopt an ocean exploration standards law and establish a commission to oversee ocean resources development.

The standards law would clearly define the nation's policy on ocean exploration, according to the second report of the council. The commission would have authority over government agencies and private organizations involved in ocean exploration.

The council said Japan should carry out an extensive survey of ocean resources, especially in its 200-mile fishing zones. The nation should also plan for conservation and exploitation of resources, it said.

Japan, to attain the objectives set forth in the council's first recommendation, must respond to the new international order and promote cooperation with other nations in ocean development, the recommendation said.

The commission would draft mid- and long-term objectives for ocean exploration and draft a standard plan for overall development. It would estimate expenditures for exploration.

In its first recommendation, the council said that by 1990, Japan should reap 12 million to 14 million tons of ocean biological resources annually, up from 10 million tons presently extracted. The 10-year plan also calls for 6 million tons of manganese masses to be mined annually and for the development of a wave-force generation plant to supply 30,000 kilowatts of power. The plan calls for construction of sea-board cities of 29,000 hectares, an increase over the present 8,200 hectares.

CSO: 4120

MILITARY

FY 1980 DEFENSE BUDGET DRAFT FINALIZED

Tokyo JPE AVIATION REPORT-WEEKLY in English 16 Jan 80 pp 6-8

[Text]

The government has completed its national budget draft for FY 1980. Of the total 117 aircraft requested by the three services for procurement in FY '80, 85 were approved, including 34 McDonnell Douglas F-15 fighter-interceptor aircraft for the Air Self-Defense Force (ASDF) and ten Lockheed P-3C antisubmarine aircraft for the Maritime Self-Defense Force (MSDF). Construction of two DD class destroyers each displacing 2,900 tons and a 1,400-ton DE escort frigate for the MSDF were also approved.

Major military equipment approved in the final Cabinet draft of the FY '80 national budget draft follows: (More detailed figures will be published in a future issue of JPE AVIATION REPORT - WEEKLY after they are released by the Defense Agency during the latter part of this month.)

<u>ITEM</u>	<u>ORIGINAL REQUEST</u>	<u>APPROVED</u>
* Class "A" GSDF Ground Equipment		
Model 64 automatic rifles	5,100	5,100
Model 62 machine guns	51	51
Model 74 vehicle-mounted machine guns	38	38
84mm recoilless rifles	200	188

<u>ITEM</u>	<u>ORIGINAL REQUEST</u>	<u>APPROVED</u>
Model 64 MAT antitank missile launchers	4 sets	4 sets
Model 79 SSM missile launchers	9 sets	8 sets
Model 64 81mm mortars	65	65
Model 75 155mm self-propelled howitzers	34	26
Model 75 130mm self-propelled MSSRs	9	8
Model 75 wind-measuring vehicles	3	3
L-90 35mm AA machine gun systems	1 set	1 set
Model 74 tanks	60	60
Model 73 APCs	9	9
Model 78 tank recovery vehicles	6	3
Model 78 snow vehicles	30	22
Model 70 pontoons	2	2
* Aircraft		
<u>GSDf</u>		
OH-6D light observation helicopters	12	10
HU-1H utility helicopters	7	5
V-107 transport helicopter	1	1
LR-1 liaison/reconnaissance aircraft	3	2
TL-1 trainer/liaison aircraft	2	2
Sub total:	25	20

<u>ITEM</u>	<u>ORIGINAL REQUEST</u>	<u>APPROVED</u>
<u>MSDF</u>		
P-3C antisubmarine patrol aircraft	10	10
US-1 search/rescue flyingboat	1	1
TC-90 instrument flight trainers	2	2
HSS-2B antisubmarine helicopters	11	2
S-61A search/rescue helicopter	1	0
Sub total:	25	15
<u>ASDF</u>		
F-15J/DJ fighter-interceptors	34	34
F-1 support-fighters	5	3
T-2 advanced trainers	13	4
T-3 primary trainers	10	6
MU-2 utility aircraft	2	1
V-107A search/rescue helicopters	3	2
Sub total:	67	50
Total:	117	85
<u>* MSDE Ships</u>		
2,900-ton DD destroyers	3	2
1,400-ton DE escort frigate	1	1
2,200-ton SSS submarine	1	1
440-ton MSC mine-sweepers	2	2

<u>ITEM</u>	<u>ORIGINAL REQUEST</u>	<u>APPROVED</u>
3,600-ton AS submarine tender	1	0
Auxiliary ships	7	3
<hr/>		
Total:	15	9
FRAM program	1	0

CSO: 4120

MILITARY

'DEFENSE THINK TANK' ESTABLISHMENT IN APRIL

Tokyo JPE AVIATION REPORT-WEEKLY in English 16 Jan 80 p 9

[Text]

A "think tank" open to both government and civilian defense technology experts will be established by April as the first facility to exchange technical information and expertise between military and civilian specialists for promotion of the Japanese defense industry. Founders will hold their first meeting January 20 to create the "Defense Technology Society" which will be a non-profit organization fully invested and supported by the civilian sector.

Promoters include four defense-related industrial and economic organizations such as the Keidanren (Federation of Economic Organizations) and the Japan Ordnance Association, and four financial organizations including the Dai-ichi Bank, as well as former technical officers of the Self-Defense Forces, notably those with the Technical Research and Development Institute, (TR&DI), JDA. The society's capital of ¥35 million will be furnished by the civilian organizations.

Among key members of the society is Yasushi Hori, former TR&DI director-general, who helped develop the oxygen-propelled torpedo during his service with the Imperial Navy. Soichiro Honda, founder of Honda Motor Co. is scheduled to become honorary chairman, while Futoshi Ibuka, honorary chairman of Sony Corporation, will be a special advisor.

According to the prospectus, the proposed society will conduct research and development work under contracts from both TR&DI and civilian firms. It will also study advanced technology for defense purposes and make suggestions and recommendations to the government and industry.

It is expected that the first Japanese "defense think tank" will be joined in the future by scholars and technical officers of JDA on active duty.

MILITARY

SELECTION OF HAWK/NIKE REPLACEMENT EXPECTED IN 1980

Tokyo JPE AVIATION REPORT-WEEKLY in English 16 Jan 80 pp 9-10

[Text]

The ASDF and the GSDF are making studies on replacements for the Nike-J and the Hawk surface-to-air missiles and it is expected both services will make decisions during FY 1980 ending March 31, 1981.

The GSDF will make a decision earlier than the ASDF since it has been considering adoption of the SAM-D Patriot of the US Army to replace the Hawk system. The Patriot is also being studied by the ASDF to replace the Nike-J, because the US missile has been developed to replace both Hawk and Nike missiles in the US Army.

The situation in the ASDF, however, is more complicated than the GSDF in that there are alternate plans to improve the Nike-J through cooperation with US manufacturers. The ASDF has been conducting studies for a final decision towards the spring of 1981. If the GSDF makes a decision earlier, however, the ASDF will be forced to finalize its plans earlier too. Unlike the US Army, the Hawk and the Nike missiles have been under control of separate services in Japan and adoption of a common SAM will entail negotiations between the services on a unified command or at least coordination between them.

The ASDF plans to begin a procurement program for the SAM-X in FY 1982 and plans for the program are required to be finalized during April-July period of 1981. To meet this schedule, the ASDF must make a decision on the SAM-X before the end of March 1981.

CSO: 4120

MILITARY

FY 1980 MILITARY R&D BUDGET DRAFT

Tokyo JPE AVIATION REPORT-WEEKLY in English 23 Jan 80 pp 8-10

[Text]

A breakdown of the research and development portion of the FY 1980 defense budget draft approved by the government follows:

Unit: ¥1 Million

ITEM	ORIGINAL REQUEST	APPROVED
* Guided weapons		
Surface-to-ship missile	921	642
Chu (medium-size) MAT antitank missile	1,227	1,023
HTPB propellant	99	95
Gas-servo systems	117	0
Precision guided simulator	582	202
Systems study on Type 2 short-range SAM	51	0
Total :	3,253	2,515

* Communications and electronic equipment

Electronic exchange systems for regional commands	1,317	889
Type 3 transport systems	514	443
Antimortar radar	560	0

<u>ITEM</u>	<u>ORIGINAL REQUEST</u>	<u>APPROVED</u>
Electronic countermeasure equipment for surface ships	1,310	0
XJ/ALQ-5 ECM for C-1	1,603	1,070
XJ/ALQ-8 ECM for F-15	1,294	823
Laser gyro	112	107
Diagonal distance measuring equipment	80	0
Laser-radar testing equipment	339	325
Heat-type generating system	89	0
Counter communication-interception systems	211	199
Night sighting equipment	264	231
Submarine inertial navigation systems	1,410	1,026
Towed passive sonar (TASS)	200	190
Signal transmitter components	56	54
Fuel batteries for field use	30	0
Ultra-low frequency equipment	38	36
Ionosphere radar	194	0
Basic design on installation of XJ/ALQ-5	210	201
Systems design on electronic warfare simulator	76	73
<hr/>		
Total:	9,907	5,667
 *Fighting vehicles and firearms		
New machine gun systems	799	760
Mechanized infantry combat vehicles (MICV)	580	551
New tank components	1,518	1,357
Soft recoil guns	501	431
New fuses	166	160
Land mines	412	145

<u>ITEM</u>	<u>ORIGINAL REQUEST</u>	<u>APPROVED</u>
New ammunition	38	0
Proximity fuses	19	17
Runway repairing material	30	0
Total:	4,063	3,421
* Ships and naval arms		
Reinforced plastic ships for testing	876	521
New diesel engines for mine-sweepers	42	40
Electric propulsion systems for torpedoes	258	0
Modified model 73 torpedo	1,714	1,340
GRX-2 highspeed homing torpedo	3,628	1,942
Element studies on antisubmarine torpedo	645	479
Total:	7,163	4,322
* Aircraft		
C-1 flying test bed	849	817
Ultra-low altitude cargo delivery systems for C-1	67	0
Automatic flight control systems for F-1	627	596
Small turbofan engines	5,752	4,566
Wind-tunnel models for aerodynamic studies	88	0
New flight control systems	78	0
High performance rotor systems	55	53
Studies on target drones	50	0
Research on high performance engines	43	41
Research on damage prevention structures	64	62
Total:	7,673	6,135
*Other equipment		
Type 2 field data acquisition system	191	181

MILITARY

ASDF PROGRAMS FOR F-15 SPARE ENGINES

Tokyo JPE AVIATION-REPORT WEEKLY in English 23 Jan 80 p 7

[Text]

Following authorization of procurement of 34 F-15 fighters in FY 1980, the ASDF now plans to procure 34 spare engines under FYs 1981 and 1982 budgets.

For the first 23 F-15 aircraft ordered in FY 1978, the ASDF requested procurement of 23 spare engines in FY 1979. But, only funds for six engines were authorized for FY 1979. ASDF tried to procure the balance in FY 1980 but funding for only ten has been authorized. As a result, the ASDF has to be satisfied with procurement of 18 spare engines (including two for calibration tests) for 23 F-15 twin-engined fighters. The plan to keep spare engines at a ratio of 50 percent of those in operational aircraft thus has been reduced to a ratio of 40 percent.

The ASDF, however, plans to achieve the 50 percent ratio in procurement of spare engines for the 34 aircraft under the second order.

CSO: 4120

MILITARY

MSDF GIVES TOP PRIORITY TO DDG FOR 1981

Tokyo JPE AVIATION REPORT-WEEKLY in English 23 Jan 80 pp 7,8

[Text]

Following curtailment in funds authorized for FY 1980, the MSDF has started readjustment of its shipbuilding plans under the FY 1981 budget. Sources report that the MSDF is giving top priority for funds in FY 1981 to construct a 4,200-ton class new DDG that will be powered with a 72,000-hp class COGAG (combined gasturbine and gasturbine) engine system. Originally, orders in FY1980 included three DDs.

But, funds for one DD was not authorized for FY 1980 and the MSDF may consider inclusion of the DD in its request for FY 1981. It is not certain whether a request for one submarine tender, rejected in the FY 1980 budget, will be repeated.

Funds for shipbuilding for FY 1981, then, may exceed the existing levels but there will be no substantial curtailment for that year since such major programs as the P-3C is not included. In any event, the MSDF seems to be intent on building a new DDG with a new COGAG powerplant under FY 1981 funding.

CSO: 4120

MILITARY

ASDF TO HOLD TALKS WITH U.S. NAVAL TEAM ON E-2C

Tokyo JPE AVIATION REPORT-WEEKLY in English 23 Jan 80 p 6,7

[Text]

The Air Self-Defense Force (ASDF) will hold a conference with a U.S. Navy delegation visiting Japan from Jan. 21 to late February on logistic support of E-2C airborne early warning aircraft, which the ASDF will deploy from 1982.

The conference will pave the way for the U.S. Navy's cooperation in the ASDF's operation and maintenance of the flying radar system manufactured by Grumman Corp.

The American team will comprise about 40 men, including Grumman engineers. During a six-week stay in Japan, it will also survey the ASDF's E-2C maintenance setup consisting of ASDF engineering teams and Japanese aircraft manufacturers designated as E-2C repair shops. The manufacturers include Kawasaki Heavy Industries, Ltd. (KHI) for airframe repair and Ishikawajima-Harima Heavy Industries Co. (IHI) for engine maintenance.

In the course of the survey, the team will visit expected E-2C bases, supply depots and major overhauling facilities, and check the advisability of the ASDF's plans for supply of E-2C repairing instruments and components and training of pilots and engineers.

The ASDF has already obtained funds to purchase E-2C support equipment incorporated into the government's FY 1980 budget draft. This will also be studied by the American team so that the ASDF can coordinate details of the purchase plan to prepare an efficient E-2C operation setup.

MILITARY

DELIVERY SCHEDULE OF SDF AIRCRAFT

Tokyo JPE AVIATION REPORT-WEEKLY in English 23 Jan 80 pp 5,6

[Text]

The number of military aircraft to be procured with FY 1980 funding was set at 85 against 117 requested. The revised delivery schedule follows:

*Air Self-Defense Force (ASDF)

F-15 -- Of the 34 aircraft authorized in the FY '80 budget draft, 17 (15 F-15Js and two F-15DJs) will be delivered in FY '83. The remaining 17 (15 F-15Js and two F-15DJs) will be delivered in FY '84 as originally scheduled. F-1 -- Funding for three aircraft will be authorized in FY '80. Two will be delivered in FY '82 and one in FY '83. T-2 -- Of the four authorized, three will be delivered in FY '82 and one in FY '83. T-3 -- All six authorized will be delivered in FY '81. One MU-2 and two V-107s that were authorized will also be delivered in FY '81.

* Ground Self-Defense Force (GSDF)

All 20 aircraft authorized for funding in FY '80, i.e., 12 OH-6Ds, five HU-1Hs, one V-107A, two LR-1s and two TL-1s will be delivered in FY '81.

* Maritime Self-Defense Force (MSDF)

Of the ten P-3Cs authorized, five will be delivered in FY '83 and the remaining five in FY '84. One US-1 flyingboat and two HSS-2B helicopters will be delivered in FY '82. Two TC-90 instrument flight trainers will be delivered in FY '81.

MILITARY

JDA OPERATION PLANS FOR FY 1980 ANNOUNCED

Tokyo JPE AVIATION REPORT-WEEKLY in English 30 Jan 80 pp 5-8

[Text]

The Japanese Defense Agency (JDA) announced January 18 its final operation plans for FY 1980, based on the budget authorized in late December last year.

Highlights of the plans for FY 1980 include reorganization of the 7th GSDF Division in Hokkaido into an armored division, acceptance of the first two of the planned 100 ASDF/McDonnell Douglas F-15 fighters, placing second procurement orders for ASDF F-15s and the MSDF P-3C antisubmarine patrol aircraft, final studies on replacements for the GSDF Hawk and the ASDF Nike SAMs, and continued studies on modernization of the ASDF BADGE (base air defense ground environment) system. There are also a number of research programs largely devoted to development of electronic devices.

Reorganization

The 7th GSDF Division stationed in Hokkaido will be reorganized into an armored division. With addition of the 1st Tank Battalion, the new armored division will comprise three tank regiments, one infantry regiment, two artillery regiments, and one support regiment. The 8th GSDF Division in Kyushu will be upgraded into a 9,000-man division, while a second GSDF mixed brigade will be activated in Shikoku. The GSDF Fuji Instructor Training Unit will be reorganized to meet service introduction of the Model 79 antiship/tank surface-to-surface missile formerly known as the Ju(Heavy)-MAT.

The MSDF fleet will be strengthened by the addition of the 52nd Escort Squadron which will be activated through commissioning of two helicopter carrying destroyers funded in FY 1976. A legal section will be set up within the Maritime Staff Office.

The ASDF's sole F-86F strike fighter unit, the 6th Squadron will be reequipped with the F-1 support fighter, marking the end of the first-line service of the first ASDF jet fighter. A third mobile air defense radar unit will be activated at Kasuga ASDF base in Kyushu.

In conjunction with above reorganization programs, an increase of 1,192 personnel including 805 for the MSDF and 387 for the ASDF will be seen, bringing the MSDF personnel strength to number 43,897 and that of the ASDF to 46,204. The number of the reserve will be increased by 1,000 to 41,600.

Intelligence and Communications

Systems studies will be conducted on a centralized command and communications network covering key defense installations throughout the country, while construction of microwave defense communications systems will continue. Surveillance forces will be strengthened for both air and sea around the country. Three military attaches will be newly posted, one each in Vietnam (GSDF), Norway (MSDF), and Poland (ASDF).

Organizational Efforts

The MSDF will continue efforts to establish an efficient control system to maintain torpedoes and mines at readiness to meet any emergency, under a five-year program. For communications with submerged submarines an ultralong-wave transmission station will be constructed, the site will be selected during the year.

The ASDF will place orders for a communication buffer system and other related equipment for use in communications between Grumman E-2C Hawkeye early warning aircraft and the BADGE system. The ASDF will also procure air traffic control and weather observation systems as well as airborne equipment for increased air safety.

JDA as a whole will continue studies on defense matters in general and on joint US-Japan efforts in particular.

Personnel and Welfare

An extended age of retirement will continue. A new NCO rank called Socho (Sergeant Major) will be set up between Warrant Officer and Master Sergeant. Old barracks will either be renovated or replaced. More housing for service personnel and their families will be constructed. Efforts will be expanded to assist those who are going to retire finding jobs. For FY 1980, 22,200 personnel will be recruited including 15,800 GSDF Privates 2nd Class, 3,500 MSDF Seamen, and 2,900 ASDF Airmen 3rd Class. Measures will be taken to secure assignments for the first graduates of the Defense Medical College.

Training

The annual ocean-going training cruise will be continued by the MSDF. For evaluation of operational capability in antisubmarine warfare, MSDF aircraft and vessels will visit Hawaii. US-Japan coordinated exercises around Japan will also continue. Preparations will be made on Iwo Jima to set up training sites. Rules controlling air space over the sea off ASDF Hyakuri base will be negotiated for better flight training of ASDF pilots.

Equipment--Orders and Delivery

The GSDF accepts 5,500 Model 64 rifles, 94 Model 62 machine guns, 141 84mm recoilless rifles, six Model 60 106mm self-propelled recoilless rifles, four Model 64 MAT launchers, five Model 79 antiship/tank SSM launchers, 69 Model 64 81mm mortars, 26 Model 75 155mm self-propelled howitzers, eight Model 75 130mm self-propelled multi-rocket launchers, two sets of L-90 35mm antiaircraft guns, 48 Model 74 main battle tanks, six Model 73 armored personnel carriers, nine Model 73 tracked tractors, three Model 78 tank recovery vehicles, 22 Model 78 snow vehicles, and three Model 70 self-propelled pontoons.

Aircraft to be delivered to the GSDF during FY 1980 will total 20 including one AH-1S antitank helicopter, 12 OH-6D light observation helicopters, three HU-1H utility helicopters, one V-107 transport helicopter, and three LR-1 liaison-reconnaissance turboprop planes.

The GSDF will place orders in FY '80 for : 5,100 Model 64 rifles, 51 Model 62 machine guns, 38 machine guns for Model 74 tanks, 188 84mm recoilless rifles, four Model 64 MAT launchers, eight Model 79 SSM launchers, 65 Model 64 81mm mortars, 26 Model 75 155mm self-propelled howitzers, eight Model 75 130mm self-propelled multi-rocket launchers, three Model 75 wind

measuring vehicles, one set of L-90 35mm antiaircraft guns, 60 Model 74 MBTs, nine Model 73 APCs, three Model 78 tank recovery vehicles, 22 Model 78 snow vehicles, and two Model 70 self-propelled pontoons.

Twenty aircraft will be ordered by the GSDF, including 10 OH-6Ds, five HU-1Hs, one V-107A, two LR-1s, and two TL-2 trainers.

The GSDF will also order parts and components for modification of the Hawk SAM to Improved Hawk standards for use with the 5th SAM unit at Hachinohe.

The MSDF will commission seven new ships (total 10,480 tons) including one DDH (funded in FY 1976), one DE (1977), one submarine (1977), two coastal mine sweepers (1978), and two auxiliary ships (1979). The MSDF air arm will be strengthened by introduction of two US-1 sea rescue amphibious flyingboats, three KM-2 and two TC-90 trainers, and four HSS-2B new shipborne antisubmarine helicopters.

The ASDF will take delivery of 47 aircraft including the first two F-15 fighters, 10 F-4EJ fighters, 18 F-1 support fighters, 14 T-3 primary trainers, one MU-2 search plane, and two V-107A rescue helicopters.

The 50 aircraft to be ordered will include 34 F-15s, three F-1s, four T-2 advanced trainers, six T-3s, one MU-2, and two V-107As.

Both the GSDF and the ASDF will send survey missions overseas to continue studies on replacements for Hawk and Nike SAM systems.

Research and Development

Efforts will continue for component engineering for a new GSDF MBT (tentatively coded Model 88), a high-speed homing torpedo for the MSDF, and an auto-pilot system for the ASDF F-1. New projects to start in FY 1980 include development of an electronic telephone exchange system for GSDF local command headquarters and an advanced airborne torpedo based on the Model 73 torpedo.

CSO: 4120

MILITARY

STATUS REPORT ON GSDF SAM MODERNIZATION PROGRAM

Tokyo JPE AVIATION REPORT-WEEKLY in English 30 Jan 80 pp 8-9

[Text]

The GSDF will complete its programs for upgrading the Hawk surface-to-air missile to the standards of the Improved Hawk for four operational units and an AAA training unit by FY 1983 and will start procurement of a new SAM system for deployment with other four operational units.

At present, the GSDF has eight Hawk operational units located at Chitose, Nayoro, Hachinohe, Matsudo, Aonogahara, Iizuka, Takematsu, and Naha. An AAA training unit, one half the size of an operational unit, is located at Shimoshizu.

Since FY 1977, the GSDF has been promoting modification of the Hawk SAM to Improved Hawk standards at a rate of one unit annually. Funds have been obtained for the units located at Chitose, Nayoro, and Hachinohe and the AAA training unit. The GSDF plans to modernize the Hawk unit at Matsudo under the FY 1981 budget.

For modernization of the remaining four operational units, the GSDF's plan appears rather flexible. These will not necessarily be equipped with a new SAM system such as the SAM-D Patriot of the US Army. Deployment of the new SAM will be made according to tactical priorities. It is possible that the units with the Improved Hawk may be reequipped with the new SAM. The GSDF's SAM units are for point defense compared to the ASDF's Nike units for area defense.

The GSDF will send a second survey team overseas in FY 1980 to select a replacement for the Hawk.

CSO: 4120

MILITARY

CPO TO SET UP FOREIGN MILITARY SALES PROCUREMENT SECTION

Tokyo JPE AVIATION REPORT-WEEKLY in English 30 Jan 80 pp 9-10

[Text]

The Central Procurement Office (CPO) of the Japanese Defense Agency (JDA) plans to establish an FMS (foreign military sales) procurement section in addition to the existing 20 sections and the inspector's office in FY 1980 starting next April as the Ministry of Finance has approved funds for the setting up the unit.

This has been prompted by the Diet's two houses and audit committees' resolutions warning against delay in the CPO's FMS procurement from the United States.

At present, the CPO's Import Section undertakes ordinary imports through commercial channels and FMS procurement based on the Japan-U.S. Security Treaty. However, the FMS procurement involves extremely complex procedures, such as classification of supplies in the U.S., transportation of items and settlement of payments. Also, formulas for advance payments/and credit supply as well as shipment schedules are not necessarily smooth. Recently subjected to FMS procurement are three P-3C antisubmarine patrol aircraft for the Maritime Self-Defense Force (MSDF) out of the first eight-plane purchase, eight F-15J fighters for the ASDF out of the first 23-plane order and four E-2C airborne early warning aircraft for the ASDF as well as materiel and explosives which cannot be imported through trading firms. FY 1979's FMS procurement totals about ¥80,000 million and a gradual increase is expected in the coming years.

The new section will engage solely in FMS procurement to smooth complex and increase supplies. Its establishment will come around the end of June 1980 at the earliest.

The name of the new section is likely to become the Second Import Section with the current Import Section renamed the First Import Section for ordinary imports.

The CPO expects the new section to consist of a director, two assistant directors and 19 staff members. It will have FMS and supply sub-sections in charge of U.S. Army, Navy and Air Force equipment purchases. Three FMS experts will be stationed in Washington and San Francisco.

CSO: 4120

ECONOMIC

RECORD CURRENT-ACCOUNT DEFICIT IN 1979 REGISTERED

OW010559 Tokyo KYODO in English 0529 GMT 1 Feb 80 OW

[Text] Tokyo Feb 1 KYODO--Japan registered a record dollar 8,643 million deficit on current account last year as galloping imports trimmed the nation's export earnings, revised government figures showed Friday.

The figure broke the previous worst deficit of dollar 4,693 million recorded in 1974 in the wake of the Arab oil embargo.

A joint Finance Ministry and Bank of Japan report showed exports rose 6 per cent over the previous year to dollar 101,193 million while imports soared 40 per cent to dollar 99,166 million.

The visible trade left dollar 2,027 million in surplus, down from a dollar 24,596 million surplus the previous year.

Central Bank officials blamed much of the decline in the merchandise trade surplus on sharp runups in import prices for crude oil (up 85 per cent in all of 1979), petroleum products and nonferrous ore.

The small visible trade surplus was more than offset by a huge dollar 9,551 million deficit in invisible trade--shipping, tourism and insurance--and a deficit of dollar 1,119 million in the balance of transfers.

Both figures were also the highest ever recorded.

In yen terms, the current account deficit came to yen 194 billion last year, compared with a yen 348 billion surplus in 1978.

The revised figures proved to be larger than estimated in a preliminary report released a week ago.

The long-term capital balance was a record dollar 12,979 million in the red, almost unchanged from a dollar 12,389 million deficit in 1978.

The basic balance was also a record dollar 21,622 million in the red, against a surplus of dollar 4,145 million.

All told, the overall balance of payments was dollar 16,662 million (yen 367 billion) in the red, the worst ever recorded.

The previous record deficit was dollar 10,074 million in 1973.

In December alone, however, the current account deficit narrowed significantly to dollar 247 million (yen 59.5 billion) from a record deficit of dollar 2,204 million (yen 538.6 billion) in November.

Exports hit an all-time high of dollar 10,675 million while imports came to dollar 9,944 million, leaving dollar 731 million in surplus, the first black-ink figure in three months.

The overall balance was dollar 512 million in the red, however, compared with a dollar 1,556 million deficit the previous month.

CSO: 4120

ECONOMIC

GOVERNMENT AGENCY SURVEYS DIRECTION OF BUSINESS INVESTMENT

OW060117 Tokyo KYODO in English 0052 GMT 6 Feb 80 OW

[Text] Tokyo Feb 6 KYODO--Business corporations in the country are showing unexpectedly strong interest in making investments chiefly in labor-saving and rationalization projects, according to an economic planning agency report.

The agency compiled the report based on a survey of 3,775 corporations capitalized at yen 100 million or more on their investments plans as of the end of last November.

Investments in the October-December quarter were believed to have dropped 3.7 per cent from the previous July-September period. Investments in the January-March quarter, however, will increase 0.3 per cent and those in the following April-June period up 11.9 per cent, each from the preceding three-month term, the report said.

Investments by manufacturing firms were expected to drop for two quarters in a row--down 1.9 per cent in the October-December quarter and down 0.2 per cent in the January-March quarter. But their investments will recover in the next April-June quarter to register a 7.7 per cent increase.

Investments by non-manufacturers will also move up 13.7 per cent in the April-June quarter, compared with a 4.7 per cent decline in the October-December period and a 0.3 per cent advance in the January-March quarter, the report said.

By industry, textiles, chemicals, electric machinery, shipping and service are notable gainers both in the January-March and April-June quarters.

Rubber-leather, machinery and electric power are expected to sharply increase investments in the April-June term, it said.

Following is a table of quarter-wise growth percentage of investments compared with the preceding three-month period:

	January-March	April-June
All industries	up 0.3	up 11.9
Manufacturing	down 0.2	up 7.7
Non-manufacturing	up 0.3	up 13.7

ECONOMIC

STRATEGY OF ELECTRONICS INDUSTRIES AGAINST IBM ANALYZED

Paris L'USINE NOUVELLE in French 6 Dec 79 pp 86-89

[Article by Gene Gregory]

[Text] In 1974 when Fujitsu and Hitachi introduced very high performance computers, IBM's technological leadership in the data processing industry was seriously challenged. In the following years, IBM has directed all its commercial thrust against Japanese industry. First by introducing new products and reducing their lifespan, then by changing its policy (billing software separately), and finally by drastically lowering prices.

The new models have not revolutionized technology, but their proliferation, the extent of their lowered prices, and the speed with which separate billing for software has taken over have shaken their competitors--though not to the point of crushing them. For the Japanese computer firms, Fujitsu and Hitachi, at the end of 1978, could take pride in having built the largest universal computer, offering an unparalleled quality/price ratio.

However, the big Japanese manufacturers could not rest on their laurels for long. IBM's fourth generation of computers, which had been awaited for a long time, and was announced in most markets in January of 1979, was finally unveiled in Japan on 1 March 1979: this was the 4300 series. Although the Japanese companies are quite obviously amazed that IBM can offer such powerful equipment for a price 30 percent lower than the price of the 370 system, NEC (Nippon Electric Company) and Mitsubishi Electric introduced their competitive systems in early February. In April Fujitsu followed suit,

announcing its first four model P systems to counter the 4300 series, and in June Hitachi introduced three model H computers, whose announced power was supposed to be greater than the latest IBM models.

Among the projects of the major Japanese manufacturers, we should also mention the introduction of high density LSI integrated circuits in the Fujitsu, NEC, and Mitsubishi computers, and the arrival of new memories designed to improve performances and decrease the size of the processor in Hitachi's three model H systems.

But closing the technological gap between Japanese industry and IBM is not the essential factor. Everybody knows this: to compete effectively against the world giant in data processing, it is not enough to have the technology. Large-scale savings, organization, and financial resources are decisive elements. The MITI [Ministry of International Trade and Industry] certainly is aware of this; for it has been encouraging businesses in this sector to cluster together and to join forces.

In the early 1970s, the MITI did in fact try to restructure this sector. In order to improve technical cooperation, it encouraged the five major computer firms to parcel out jobs among themselves, leaving it up to OKI Electric to attack the market for peripheral equipment and specific-use computers. And everything seems to suggest that the MITI would like to see the entire industry merge into a single company.

The MITI seems to take its wishes for realities; it seems quite unlikely that Fujitsu and Hitachi, the two leaders in Japanese data processing, will agree to merge their data processing activities. Nor it is any more apparent that NEC and Mitsubishi might agree to withdraw from the large computer market in order to specialize in small and medium-sized systems.

A Chess Player's Strategy

The MITI's "dream" still has some basis, though. For isn't IBM the only multinational company that can optimize its investments on a worldwide basis? None of the major Japanese firms involved in data processing can make such a claim. To come close to this, the Japanese data processing industry has implemented the only effective policy: to ensure its presence in all markets of the world in order to balance its domestic and foreign sales between now and 1985.

Since Fujitsu's first investment in the American firm, Amdahl, in 1972, the Japanese manufacturers have gradually created systems of cooperation with foreign computer manufacturers or distributors. Acquisitions, joint ventures, agreements to supply parts, two-way licenses, and technical assistance contracts have mushroomed. It is precisely the existence of this network, and especially the ties between Japanese manufacturers and the U.S. distributors of compatibles which led to IBM's counter-offensive.

With its fourth generation, IBM is taking aim directly and specifically at the Japanese industry, and at the same time plans to increase to the utmost its pressure on the distributors of compatible systems--such as Amdahl, Intel, Magnuson, and Control Data. IBM's prime objective is evidently to force the Japanese on the defensive by raising the challenge on their own territory.

Chess players know this strategy well, but it does force them to modify their usual methods. In this case, IBM has decided to market its small and medium systems (4331 and 4341), while it had traditionally attacked the market from the top. IBM has adopted this strategy in order to challenge the Japanese on their own ground. For the Japanese manufacturers hold over 70 percent of the Japanese market for mini and medium systems.

IBM's New Strategy

IBM's strategy seems most appropriate when we remember that its share of the market in Japan is under 30 percent for large systems and even less for medium-sized systems. IBM's strategy is designed to attract Japanese users of mini and medium systems and to force the Japanese manufacturers to make a supreme effort to equal the IBM systems in quality and price. Therefore, the Japanese subsidiary of IBM set up in Tokyo, on an experimental basis, a new center which can provide services for about 60 different software systems.

Yet it is not at all certain that IBM will achieve its objectives in Japan. And for one obvious reason: the Japanese manufacturers of large central units have quickly managed to equal or improve on the IBM performances. So there is no major reason why the users should switch to IBM. Furthermore, in this segment of the market, the users are much more dependent on external services. And IBM, with its high costs, can only with great difficulty manage to offer its services on terms comparable to those of the Japanese, who subcontract them to specialized firms whose costs are lower.

Even more important: the speed with which the Japanese manufacturers have caught up to IBM's new technology has caused IBM's strategy for its fourth generation equipment to lose a great deal of its effectiveness. Even before the arrival of these computers in Japan, NEC had brought out two models (Acos System 250) competitive with the IBM 38 and 4331 systems. According to NEC, the new model 60 has performances 30 to 40 percent higher than those of the 4331.

Also beating IBM to the finish line, and to prove that it intends to remain a serious competitor in this market, Mitsubishi Electric announced two computers in the Cosmo series (Cosmo 700111 and 700 S) with an improved data processing capability. These are the first medium-sized universal computers capable of forming "multi-processing systems" in which the processors are connected. Mitsubishi claims that its Cosmo 700111 is twice as powerful as the IBM 4341, and the Cosmo 700 S is claimed to have performances four times those of the 4331!

Following NEC and Mitsubishi, Fujitsu 6 months ago announced four new computer systems designed to offer several alternatives to the IBM 4331 and 4341. The new Fujitsu systems (model F) are claimed to be up to 1.6 times more powerful than the IBM 4300 models.

However, IBM's tactic of separate billing for software was a more difficult problem. Now, only 20 percent of Fujitsu's software is sold separately, and not until 1981 will the separate sales procedure be widespread. But Fujitsu does have a secret weapon. The model F will be able to process the Japanese "Kanji" (Chinese characters) and the "Kana" (Japanese characters) as well as digital characters. It can be used to process data in Japanese mode, in digital/Kana, and in a mixed mode. And even more significant for Fujitsu's export ambitions is the fact that the new system could also handle other Asian languages.

Hitachi's response to the IBM 4300 offers further proof: the Japanese data processing industry clearly anticipated IBM's technological advances. The new Hitachi series have high density, fourth generation LSI, multichip modular structures, multi-layer integrated circuit strips, etc. In response to IBM's separate software policy, Hitachi is going to offer 124 different programs created for the new system.

Since the Japanese firms can offer very high performance equipment at prices either equal to or lower than IBM's, the world data processing leader has hardly improved its position in the Japanese market for the time being. But we can well imagine that IBM has not said its final word. It can use its power to freeze the market by announcing far in advance the release of new equipment, as it did in 1977 and in early 1979.

By its very nature, this advantage is only temporary and fades with the appearance of the new models. As soon as it is established that IBM is not offering substantial advantages, and when the clients get tired of waiting for new models, the distributors of compatible equipment should recover part of their sales.

Japanese Computers "All Over the World"

Now that the American threat is tending to fade away, we still do not know to what extent it impeded Japanese computer sales abroad. It may be suggested that while the U.S. strategy cooled enthusiasm for Japanese products in foreign markets, it did not completely block it. IBM's strategy would even seem to have supported the major Japanese manufacturers in their decision to establish close ties with foreign manufacturers and distributors.

Furthermore, Frank T. Carey, the president of IBM, said that he expected to find Japanese computers "all over the world." And really, how could he avoid that? The expansion of the world data processing market, combined with the IBM strategy, has forced the Japanese to export. There are three reasons behind this.

1. More than ever before, the Japanese manufacturers are seeking large-scale economies which can give them production costs enabling them to follow IBM in a relentless price competition. This means that the Japanese must, no matter what the cost, increase their share of the world market in order to survive.
2. The final control of the domestic Japanese market depends on the world market; whoever increases his sales abroad most rapidly will have lower production costs than his competitors.
3. IBM's turn-around in favor of an aggressive price policy in 1977 offered proof that the elasticity of price as a function of demand for computers is a key factor.

Since the failure, in the early 1970s, of Mitsubishi Electric's first attempt to move its Melcom mini-computers into the European market, the Japanese computer firms have changed their tactics. Rather than moving into foreign markets alone, they are now seeking partners. And these forms of cooperation do seem best suited for them because of the structure of the Japanese balance of trade.

Masumi Esaki, the minister of international trade and industry, confirms this: "Japan is going to promote joint ventures, not just in data processing, but also in aviation and in the automobile industry." Fujitsu has signed agreements with the Amdahl Corporation, and more recently with SECOINSA [Spanish Communications and Data Processing Company, Inc] in Spain and with Siemens in Germany. Hitachi has signed a first agreement on research and development with the English firm, ICL, which opens up a vast range of possibilities for future cooperation. These agreements cover technological assistance, the allocation of production, and naturally, sales.

In Japan, it is estimated that these cooperation agreements will guarantee the dynamism of the Japanese data processing industry. And more and more, Japanese manufacturers are coming to feel that collaboration with European computer manufacturers and distributors would be very profitable for everyone concerned.

Even if the Japanese do manage to strengthen their own share of the market and their share of the "combined" market (based on cooperation agreements with other manufacturers), that obviously does not mean that IBM will not continue to grow as it has in the past. And yet, we might be inclined to think that most of the growth of the world market will profit IBM a little less, and the others a little more than in the past.

7679

CSO: 4200

ECONOMIC

GOVERNMENT REPORT FORECASTS ECONOMIC OUTLOOK IN 1980

OW241225 Tokyo KYODO in English 1124 GMT 24 Jan 80 OW

[Excerpt] Tokyo, 24 Jan (KYODO)--The government published an official economic outlook for fiscal 1980 Thursday projecting real economic growth at 4.8 per cent, down from an estimated 6 per cent in the current fiscal year ending March 31.

The outlook gives the inflation rate in the next fiscal year as 6.4 per cent, compared with an estimated 4.7 per cent in the present year.

Government economists forecast that the export trade would play a larger role in bringing about economic growth in fiscal 1980 than in the present fiscal year.

The economists projected the rate of contribution of overseas demand, chiefly exports, to economic growth in the next fiscal year at 1.8 per cent, or three times that of fiscal 1979 estimated at 0.6 per cent.

This means nearly two-fifths of the 4.8 per cent real economic growth would be contributed by overseas demand, they said.

The economists estimated the contribution of domestic demand to economic growth in fiscal 1980 at 3 per cent, well below an estimated 5.4 per cent in fiscal 1979. This means, according to them, that about three-fifths of the real economic growth would be brought about by domestic demand.

Government spending was estimated to increase 6.8 per cent in nominal terms from fiscal 1979, but only 0.9 per cent in real terms. Governmental capital spending, chiefly on public-works projects, was projected to increase by a nominal 8.7 per cent, since there will be an about yen 800 billion in public works appropriation carryover to fiscal 1980, according to economists.

CSO: 4120

ECONOMIC

BANK OF JAPAN GOVERNOR SEES CONTINUED BUSINESS EXPANSION

OW231245 Tokyo KYODO in English 1221 GMT 23 Jan 80 OW

[Text] Tokyo, 23 Jan (KYODO)--Haruo Maekawa, governor of the Bank of Japan, said Wednesday Japanese business activity was continuing an unexpectedly solid expansion.

Maekawa forecast no major change in the present expansionary keynote in the first half of the current year.

He made the remark at a news conference, which followed the meeting of heads of the Central Bank's regional branches.

He also predicted that business slowdown thus would come much later than expected.

The governor reasoned:

- A continued solid expansion in businesses' fixed investments;
- Firming up of personal consumption spending against the background of steady consumer prices;
- A definite expansionary trend in exports; and
- Continued high business profits.

Referring to applications by eight electric power companies for an average 64.4 per cent raise in electricity rates, Maekawa said the planned boost could push up general prices appreciably. He asked the government authorities to be very severe in acting on the applications, particularly the timing and size of raise.

The governor warned against the rising trend in commodity prices and said it should be closely watched.

He said there would be no change whatever in the Bank of Japan's intention of maintaining the present tight credit policy.

Maekawa, however, ruled out the possibility of an immediate raise in the official discount rate, currently at 6.25 per cent per annum.

CSO: 4120

ECONOMIC

FINANCE MINISTRY REPORTS TRADE GAP DUE TO YEN FALL, PRICE RISES

OW230905 Tokyo KYODO in English 0753 GMT 23 Jan 80 OW

[Text] Tokyo, 23 Jan (KYODO)—Japan wound up 1979 with a record trade deficit of dollar 7.5 billion in an about-face from a record surplus of dollar 18.3 billion the previous year, the Finance Ministry reported Wednesday.

The previous record deficit of dollar 6.58 billion was registered in 1974.

In yen terms, the deficit came to yen 1,684 billion, the second highest after the record deficit of yen 1,868.5 billion in 1974.

Ministry officials blamed much of the turnaround in the nation's foreign trade on rising prices abroad and the yen's depreciation which made imported crude oil, lumber and other raw materials more expensive to obtain in Japan.

Japan's imports totaled yen 24,228 billion, up 44.8 per cent over the previous year, while exports rose at a slower pace of 9.7 per cent to yen 22,543.6 billion.

The customs-cleared figures are preliminary and subject to changes later as more data become available.

Exports are measured free on board while imports are measured with cost, insurance and freight included.

Crude oil imports totaled 281 million kiloliters, up 3.9 per cent. The volume was the second only to an all-time high of 289.7 million kiloliters in 1973.

In value, oil imports amounted to yen 7,377 billion, an increase of 48.1 per cent.

Lumber rose 86 per cent to yen 1,613 billion.

Nonferrous metals, excluding copper, moved up 69.5 per cent to yen 629.9 billion and steel scrap went up 51.3 per cent to yen 106 billion.

In trade with the United States, Japan had a surplus of dollar 60.29 million, compared with a dollar 10.1 billion surplus the previous year.

Japan's exports to the U.S. rose 9.8 per cent to yen 5,774.9 billion while imports jumped 43 per cent to yen 4,446.5 billion.

Japan exported yen 2,771 billion worth to the European Common Market, up 19.1 per cent, while its imports from the nine-nation community came to yen 1,649.6 billion, up 29.5 per cent.

Exports to the Middle East climbed only 4.1 per cent to yen 2,364.6 billion while imports spurred 46.7 per cent to yen 6,475.8 billion.

In December alone, Japan imported dollar 254.8 million more than it exported.

The first December deficit since 1963 compared with a dollar 1,973 million surplus in the same 1978 month.

Exports rose 11.5 per cent to dollar 10,855 million while imports galloped ahead at a 43.1 per cent year-to-year clip to yen dollar [as received] 11,110 million.

Major export items included cars (58.1 per cent in value), television sets (up 31.5 per cent), steel (up 36.4 per cent) and chemical fertilizers (up 46.7 per cent).

Crude oil imports amounted to 26,210,000 kiloliters, up 2.6 per cent, or yen 1,022.5 billion, up 136.6 per cent.

Crude oil imports accounted for the biggest portion of 37.6 per cent of all imports, up from 28.3 per cent a year earlier.

CSO: 4120

ECONOMIC

JETRO TO ESTABLISH ADDITIONAL OFFICES OVERSEAS

Tokyo KYODO in English no time given 18 Jan 80 OW

[Text] Tokyo, 18 Jan (KYODO)—The Japan External Trade Organization (JETRO) said Friday it will open an office in Lisbon and two additional offices in London and Marseilles in equal partnership with Japanese industries in fiscal 1980 starting April 1.

The semiofficial trade promoting agency said the London office will be concerned with collecting data on petrochemical resources and the Marseilles office on ships.

The number of its trade centers, offices joint facilities, offices totally financed by industries and local public entities will remain unchanged at 75 with total staff at 278.

But there is possibility of a change in the number of facilities wholly financed by industries and local public entities, JETRO said.

In the fiscal 1980 budget, the government supplies 75 per cent of JETRO's funds and 25 per cent comes from industries. The government subsidy approved by the Finance Ministry is yen 10.4 billion, up 8.5 per cent over the previous year, and an additional yen 5 billion will come from industries.

Among new projects envisaged under the proposed budget is publicity and information services on implementing multilateral agreements concluded last April on technical barriers to trade and government procurement.

The publicity will be made through the International Trade Public Bulletin and the information will be provided through JETRO's 75 overseas facilities and 30 domestic facilities.

Other new projects include providing information to small-to-medium size Japanese firms on overseas investment and public relations activities in 20 major cities--10 in the U.S. and 10 others in Europe.

To promote trade with developing nations, JETRO will start accepting five researchers a year from trade promoting agencies in these nations to help them survey Japanese markets.

A committee for dispatching trade promotion advisers will be created to study long-term trade promotion with the developing nations.

To promote imports of manufactured products, JETRO will increase its subsidy to the semiofficial Manufactured Imports Promotion Organization (MIPRO) and send more government-sponsored import promotion missions, including those to Brazil and South Korea. Such a mission was sent to the Benelux countries last year.

Emphasis will be also placed on followup studies of these missions and accepting export promotion missions from foreign countries.

CSO: 4120

ECONOMIC

INDUSTRY EXPECTS GOOD BUSINESS IN THE 80'S

Tokyo JPE AVIATION REPORT-WEEKLY in English 16 Jan 80 pp 1-3

[Text]

With a target of catching up with the world's foremost technical standards during the 80s, the Japanese aircraft industry has entered 1980 with a number of new programs that will lead to good business in the next decade.

According to a joint market survey conducted by MITI, the Society of Japanese Aerospace Companies (SJAC), and the Civil Transport Development Corp. (CTDC), world demand during 1979 through 1995 will total 1,700 130-passenger class airliners and 2,300 for 200-passenger class aircraft, the peak period being forecast for the ten years starting in 1985. The Japanese industry is making preparations so that it will be able to take a sizable share in the world market, by upgrading technical standards through a number of international programs, as well as national projects. The scale of the Japanese industry at present is about ¥300,000 million in terms of annual output, which is about one-eighteenth that of the US, one-third of the UK, and about half that of West Germany.

The latest and the most significant program of the industry is the joint development of an engine based on the Rolls-Royce RB432, coded in Japan as the XJB, for commercial aircraft.

Although not as showy as the Japan-UK engine collaboration program, talks are under way for another aero engine program in the form of subcontracts from Rolls-Royce for manufacture of parts of the RB211 engine, according to Japanese industry sources.

For use with future military aircraft such as trainers, the TR&DI, JDA, in collaboration with IHI, will start a development program in FY 1980 for the F3 1.6-ton turbofan engine. The engine is based on an experimental engine of 1.4-ton thrust.

In the field of aircraft production, the Y-X (Boeing 767) joint development and production program has entered its third year. Under contracts with Boeing Commercial Airplane Co., MHI, KHI, and FHI are manufacturing fuselages, wing fairings, doors, and wing ribs for the first production lot of thirty-two aircraft. Assembly of the prototype will start in August.

Studies on the Y-XX, a next jetliner program through international collaboration, will be finalized during 1980. MITI has started in the new year studies for a definite plan for the Y-XX through its advisory body, the Aircraft and Machinery Industry Council. SJAC, on the other hand, plans to send an Y-XX study team to Europe and the US. The industry received proposals on joint programs for the Fokker F29 and the Airbus Industrie single-aisle airliner in 1979 and 1980 will be a time for decision to select a definite course for a 150-passenger twinjet aircraft for the world market.

A national program for an experimental jet STOL (short takeoff and landing) transport aircraft has entered its second year. During 1980, an ASDF C-1 tactical transport will be modified for installation of a USB (upper surface blowing) type of highlift device and related systems. The four-jet STOL aircraft is scheduled for its first flight in 1983.

JDA has initiated studies on the next ASDF intermediate trainer to be developed locally. The engine for the trainer is scheduled to be the F3 small turbofan.

Programs for the Mitsubishi MU300 business jet and the Kawasaki-MBB BK-117 utility helicopter entered their second year with bright sales prospects while the Fuji FA700 turboprop developed jointly with Rockwell International is suffering from a dull response. SJAC is studying measures for promotion of the small aircraft industry.

Two programs for the military are well under way, F-15 fighter production for the ASDF and P-3C antisubmarine patrol aircraft production for the MSDF. Requirements for the fighter are for 100 aircraft and for the Orion 45.

Studies have started on replacements of the ASDF C-1 twinjet transport and the MSDF PS-1 ASW flyingboat. Both were developed domestically in the '60s and production will stop during 1980.

Export orders for airborne equipment are on the increase. But, most of the equipment on order are items produced under license, reflecting a technical gap between Japanese and overseas firms.

Large expenditures will be required for development of a new aircraft or an engine. Development cost for the XJB engine is estimated to total ¥140,000 million and that for the Y-XX jetliner ¥200,000 million. In order to reduce costs and also to ensure marketability, international collaboration is a necessity in new aircraft and engine programs.

Statements made by Kiyoshi Yotsumoto, Chairman of KHI, may represent the general posture of the aircraft industry. "We will pursue every possible means for international development programs, not greatly concerned with what the prospective partner has in mind. At the same time, we will make every effort to upgrade our technical standards and to promote marketability to meet demand in the foreseeable future."

The industry has been making large investments for a number of new programs for the 80s. KHI has invested ¥15,000 million for the P-3C program and a further ¥5,000 million will be invested during 1980. Similar investments are being carried out by other aircraft manufacturers such as MHI.

Major aircraft equipment manufacturers such as Shimadzu and Tokyo Keiki completed their investments last year and are intent on vigorous sales activities in the new year.

MITI predicts output of the Japanese aircraft and engine industry in 1980 will total ¥239,300 million (combined sales of MHI, KHI, FHI, Shin Meiwa, NIPPI, and IHI). Of this, 72.5 percent or ¥173,400 million will come from aircraft manufacture and repair. Engine manufacture and repair will account for 27.5 percent or ¥65,900 million.

The new year, therefore, will become the first year for the Japanese industry to initiate full-scale preparations to obtain a better position in the world market.

CSO: 4120

ECONOMIC

NAL TO CONTINUE STOL DEVELOPMENT IN FY 1980

Tokyo JPE AVIATION REPORT-WEEKLY in English 16 Jan 80 p 5

[Text]

The National Aerospace Laboratory (NAL) during FY 1980 will continue work on development of a STOL (short takeoff and landing) jet transport and fabrication of two FJR engines for the prototype with ¥6,856 million.

Control systems for the aircraft will be developed while an ASDF C-1 tactical transport will be modified for installation of highlift devices and systems. NAL requested funds for fabrication of four FJR jets but only two were authorized. It will request funds in the FY 1981 budget for the additional two units. Consequently, completion of the prototype aircraft will be delayed by several months. It is now scheduled for completion during 1983.

Another project of NAL for FY 1980 includes development of a second broadcasting satellite. The program will cost ¥60,000 million and launching by a N-rocket is planned for FY 1983.

CSO: 4120

ECONOMIC

XJB ENGINE JOINT DEVELOPMENT PROGRAM STARTS IN FY 1980

Tokyo JPE AVIATION REPORT-WEEKLY in English 16 Jan 80 pp 4-5

[Text]

MITI obtained authorization for its ¥1,785 million subsidy in the FY 1980 national budget draft to help start an Anglo-Japanese joint aero engine development program. An advanced turbofan engine based on the RB432, coded the XJB by the Japanese, will be developed jointly by Rolls-Royce Limited of the UK and three Japanese manufacturers, IHI, MHI, and KHI. An agreement between the British and Japanese parties was signed in December 1979 for the seven-year program, FYs 1980-86, along with related agreements covering technical knowhow and marketing activities.

The cost for the aero engine of 8 to 9 tons of thrust will be equally shared by the British and the Japanese parties; the Japanese government is going to assist the latter by providing subsidies which are to be repaid after the engine is commercialized. Rates of the government subsidies vary with progress of the program. It will be three-quarters initially and decreases to two-thirds, and then to one-half.

Details of the costs of the engine collaboration program and the government subsidies for FY 1980 follow:-

(Unit: Million Yen)

Planning & Development Costs:	350
Designing Costs:	2,701
Engineering Costs:	1,501
Prototype Fabrication Costs	357
	<hr/>
Total:	4,911 (A)

Expenditures to be borne by the Japanese (one-half of (A))

	<u>Before</u>	<u>After</u>	<u>Total</u>
	<u>full launch :</u>	<u>full launch :</u>	
Planning & Development Costs:	132	44	176
Design Costs:	1,079	271	1,350
Engineering Costs:	563	188	751
Prototype Fabrication Costs:	0	179	179
Total:	1,774	682	2,456
Government subsidy:	1,331	454	1,785

CSO: 4120

ECONOMIC

XJB ENGINE AGREEMENT TO BECOME EFFECTIVE JANUARY 31

Tokyo JPE AVIATION REPORT-WEEKLY in English 23 Jan 80 pp 3,4

[Text]

The agreement for joint development of the XJB/RB432 aero engine between Rolls-Royce Limited and three Japanese manufacturers---IHI, MHI, and KHI--- that was signed in Tokyo December 11 and in London December 12 last year, will become effective January 31 as required arrangements such as government approval on related agreements will be completed during January.

MITI, the government agency supporting the Anglo-Japanese project, obtained authorization from the Ministry of Finance on its ¥1,785 million subsidy for the project in FY 1980 while the three signatory companies of the project completed action to put up ¥680 million for that year, thus meeting the required investment of ¥2,465 million for the first year of the seven-year project.

A cross-licensing agreement, in conjunction with the project, requires government approval under the Foreign Exchange & Trade Control Law. But, it will be approved without delay and before the end of January since no royalties are involved.

The cross-licensing agreement provides free exchange of technology between the two parties. In case the Japanese promote development of an aero engine other than the XJB, the Japanese in principle are to subcontract the British a certain portion of the development and production work provided that such an engine comes into a certain category centering around the XJB/RB432.

ECONOMIC

JOINT VENTURE TO BE SET UP SOON FOR XJB/RB432 PROGRAM

Tokyo JPE AVIATION REPORT-WEEKLY in English 30 Jan 80 pp 1-2

[Text]

Three Japanese aero engine manufacturers and Britain's Rolls-Royce Ltd. will set up a joint venture in early February for the XJB/RB432 engine collaboration program.

The new firm tentatively called "Rolls-Royce Japanese Aero Engines Ltd." to be initially capitalized at £2,000 or ¥1 million, will coordinate development, manufacture and marketing of new aircraft engines, and carry out related work.

The Japanese firms--IHI, KHI and MHI--and Rolls-Royce will each have a 50 percent stake in the joint venture. IHI will hold for 60 percent of the Japanese share, KHI 25 percent and MHI 15 percent according to their work sharing in the engine development program.

The two parties will send five directors to the new company to be based at one of Rolls-Royce's engine facilities in the UK. Two board directors will come from IHI and one each from KHI and MHI. The remaining Japanese director will be independent.

Candidates for the Japanese directors are Consultant O. Nagano and Executive Director K. Imai of IHI, Vice President T. Ando or Executive Director H. Tsukamoto of KHI and K. Ikeda of MHI. The independent director is expected to come from the Society of Japanese Aerospace Companies (SJAC).

The Japanese firms will also establish a non-profit organization to serve as a unified Japanese company in the development stage like CTDC for the YX program, though ERAAE will perform work in the initial stage. The three companies will act as subcontractors of the non-profit organization.

* Preparatory committee due for engine program

Following conclusion of agreements with Rolls-Royce Limited in December last year, three Japanese aero engine manufacturers--IHI, KHI, and MHI--will soon jointly activate a preparatory committee to pave the way for start in April of the XJB/RB432 Anglo-Japanese engine collaboration program. Legal and financial arrangements for the program will be completed before the end of January.

The preparatory committee, therefore, will devote primary efforts to determine type and quantity of machinery and equipment required for design work such as computers and measuring equipment. These will be made available from the three manufacturers. It will also determine the number of Japanese engineers to be sent to Rolls-Royce in April to participate in initial launching. The British firm hopes to receive 40 qualified Japanese engineers while Japanese manufacturers believe less will be sufficient. They point out that Japanese engineers are generally more versatile than their foreign counterparts. They have a wider range of expertise related to designing while those in foreign countries are usually engaged in specific, limited areas, Japanese manufacturers maintain. In case of the Y-X (Boeing 767) program currently under way, half the Japanese engineers originally requested by Boeing is proving sufficient, they say.

Following initial launching in April, the joint aero engine program will enter its full launching stage in January 1981 as opposed to July or August this year because of a reduced government subsidy of ¥1,785 million for FY 1980.

CSO: 4120

ECONOMIC

SJAC SURVEY MISSION TO VISIT EUROPE IN SPRING

Tokyo JPE AVIATION REPORT-WEEKLY in English 30 Jan 80 p 2

[Text]

The Society of Japanese Aerospace Companies (SJAC) plans to send a survey mission to Europe in April this year, to study the latest trends and future policies in the European aircraft industry.

The SJAC mission to Europe was planned for last fall as an industrial effort in response to government planning for promotion of the Japanese aircraft industry. The Policy Subcommittee of the Aircraft Div., Aircraft & Machinery Industry Council, an advisory body to MITI, last August made "interim" recommendations on future government policies and pointed out, among other things, advisability of concrete studies on development of a civil transport aircraft following the Y-X (Boeing 767) which would accommodate "100 or more passengers."

The same subcommittee on November 15 last year reported the status and policies in aircraft industry in the world's major countries to provide data for study.

In the meantime, Fokker Aircraft of the Netherlands and Airbus Industrie presented to the Japanese their respective proposals on joint development of an airliner that would meet Japanese ideas.

The SJAC survey mission in April, however, will have no direct bearing on these proposals since its primary purpose is to collect newer information about the European aircraft industry for continued studies on future government and industrial policies. The style of the SJAC mission, sources point out, is different from a survey mission sent by MITI to four countries including the US in June 1971.

ECONOMIC

JAPAN AVIATION ELECTRONICS TO DEVELOP STRAP-DOWN INS

Tokyo JPE AVIATION REPORT-WEEKLY in English 30 Jan 80 p 3

[Text]

Japan Aviation Electronics Industry, Ltd. has concluded a contract with the Japanese Defense Agency for research and fabrication of the new strap-down inertial navigation system (INS) said to be superior to the existing gimbal type INS.

The company, which has produced inertial platforms for F-4EJs' INS and such systems for the F-1 and the ASM, has up-to-date aircraft navigation technology.

Under the contract, it will fabricate a research system on software in FY 1979 and 1980 for the 3rd R&D Center's evaluation of the strap-down INS.

This will contribute to developing Japan's INS and aircraft guidance technology, allowing Japan to come up to the United States and European nations which have already started strap-down system development programs.

The existing INS plots a plane's position, speed, direction, altitude and other data for its navigation by an independent navigation system which does not require a ground station as radio navigation systems do. It is not bothered by jamming, etc.

In the strap-down INS, a computer computation replaces the function of gimbal type devices consisting of inertial sensors. After the gimbal devices are removed, it will become smaller and lighter than current INS. It also contains other features, including longer life, improved reliability and maintainability and lower costs.

CSO: 4120

ECONOMIC

IBM TO PROVIDE TECHNICAL AID TO MELCO FOR F-15 MAINTENANCE

Tokyo JPE AVIATION REPORT-WEEKLY in English 30 Jan 80 pp 3-4

[Text]

International Business Machines Corp. of the United States has signed a contract with Mitsubishi Electric Corp. (MELCO) of Japan to provide technical assistance in repair and maintenance of computers installed on the ASDF F-15 fighter, according to government sources. IBM has so far never provided other companies technology for maintenance as well as production of computers.

The Japanese Defense Agency had requested IBM to allow Japanese firms to produce the F-15's computers under license. It eventually decided to purchase complete computers from the U.S. company and selected MELCO to maintain and repair the computers. IBM has accepted the technical assistance deal apparently because the computers are designed only for military purposes.

MELCO expects the contract to enable it to benefit from IBM's advanced computer technology. The F-15's digital computers are linked with the inertial navigation, air data computer, fire control and other systems.

CSO: 4120

ECONOMIC

FIRST STOL TEST FLIGHT EXPECTED IN SUMMER 1983

Tokyo JPE AVIATION REPORT-WEEKLY in English 30 Jan 80 p 4

[Text]

The first flight of the National Aerospace Laboratory's (NAL) experimental short take-off and landing (STOL) aircraft will be delayed by about six months until the summer or autumn of 1983 as the government's FY 1980 budget draft has forced a slight change in the NAL's original STOL aircraft development plan. NAL is now studying how to revise the plan.

Although NAL had intended to fabricate a complete airframe and manufacture four FJR engines for the STOL aircraft under FY 1980 appropriations, the national budget has only authorized orders for modified airframe parts and two engines. As a result, the first flight of an experimental aircraft, originally planned for February 1983, will be delayed until August or September of the year. Delivery of the plane to NAL for flight tests will be made in October or November or about six months behind schedule.

However, flight tests will begin within FY 1983 (April 1983-March 1984) and end in 1985 as originally planned.

The two FJR engines to be ordered in FY 1980 will be delivered to NAL in FY 1982 for airborne tests in the autumn of the year before being installed. The remaining two will be ordered in FY 1981 for delivery at the beginning of FY 1983.

Meanwhile, NAL has decided to have its test pilots trained at ASDF for three years from FY 1980 to prepare for the FY 1983-85 flight tests.

CSO: 4120

ECONOMIC

TR&DI TO PURCHASE TEN XF-3 ENGINES FOR PFRT

Tokyo JPE AVIATION REPORT-WEEKLY in English 30 Jan 80 pp 4-5

[Text]

The Japanese Defense Agency's (JDA) Technical R&D Institute (TR&DI) will purchase 10 prototype XF-3 fan jet engines for pre-flight rating testing (PFRT) from FY 1981 to 1983 before finishing all tests of the new engine designed for the MT-X next-generation medium jet trainer in FY 1985. A complete XF-3 engine will be mounted on a new trainer in FY 1986.

The TR&DI has already begun to finalize a detailed PFRT plan and purchase of five prototype engines has been incorporated into the government's FY 1980 budget draft. It expects funds for ordering the remaining five units to be in the FY 1981 budget.

The PFRT plan will be considered by the JDA's Equipment Council after Diet approval of the FY 1980 budget and be authorized by next summer. The TR&DI will receive one engine for the PFRT every two to three months after the first delivery in the middle of FY 1981.

Two XF-3 prototype engines have already been tested. The TR&DI conducted 200-hour running tests by using the first prototype from FY 1977 to 1978 and confirmed a thrust of 1.2 tons. The first experimental engine was ordered under the FY 1975 budget and its fuel control systems under the FY 1976 budget.

The second experimental engine with cooling turbines, which was ordered under the FY 1977 budget, succeeded in producing a thrust of 1.66 tons, compared with an original target of 1.6 tons, in the middle of last December.

Target thrust has thus been achieved. Only final pre-flight tests are left to confirm durability and other performance aspects.

ECONOMIC

BRIEFS

AID TO RWANDA--Tokyo Jan 24--The Japanese Government Thursday decided to extend an aid grant totaling yen 100 million to Rwanda for medicine and medical equipment, the Foreign Ministry announced Thursday. Notes on the Japanese aid were exchanged the same day in Tokyo by Rwandan Ambassador Jean-Chrysostome Nduhungirehe and Shinichi Yanai, director general of the Economic Cooperation Bureau of the Foreign Ministry. [OW241423 Tokyo KYODO in English 0741 GMT 24 Jan 80 OW]

MEDICAL GRANT TO BENIN--Tokyo Jan 30--Japan has promised to extend a grant aid of up to yen 400 million to Benin for medical materials and equipment for hospitals in [this] West African country, the Foreign Ministry said Wednesday. Notes to this effect were exchanged in Cotonou on January 24 between Japanese Ambassador Kenji Yasuda and Michel Alladaye, minister of external cooperation of Benin, it said. The grant will be used to supply medical materials and equipment to two hospitals in Cotonou and Porto Novo. [Text] [OW300606 Tokyo KYODO in English 0235 GMT 30 Jan 80 OW]

WELFARE GRANT TO ZAIRE--Tokyo Jan 30--Notes were exchanged in Kinshasa Tuesday on Japan's extension of a grant aid of up to yen 500 million to Zaire for a social welfare expansion project in that country, the Foreign Ministry said Wednesday. It said the notes were exchanged between Kazuo Yamashita, Japanese Ambassador to Zaire, and Bokana S'Ondangela, director-general of Zaire's planning agency. The ministry said yen 400 million worth of dairy products and yen 100 million worth of canned fish will be given to Zaire as part of the measures to help alleviate the chronic shortage of basic consumer goods. Japan furnished yen 400 million worth of canned fish to that country last year. [Text] [OW300606 Tokyo KYODO in English 0212 GMT 30 Jan 80 OW]

ETHYLENE PRODUCTION FIGURES--Tokyo Jan 21--Ethylene production in calendar 1979 totaled 4,774,600 tons, up 9 percent from 1978, the Association of Petrochemical Industries reports. Among ethylene derivatives, the year's output of low density polyethylene totaled 1,200,900 tons, up 29 percent from the previous year; high density polyethylene, 797,000 tons, up 23 percent; polypropylene, 1,022,400 tons, up 37 percent; polystyrene, 640,100 tons, up 28 percent; styrene monomer, 1,238,400 tons, up 10 percent; styrene butadiene rubber, 448,500 tons, up 3 percent; butadiene rubber, 193,000 tons, up 7 percent; benzene, 2,178,700 tons, up 8 percent; toluene, 961,800 tons, up 9 percent; xylene, 1,318,100 tons, up 6 percent; vinyl chloride monomer,

1,591,100 tons, up 32 per cent, and polyvinyl chloride, 1,851,900 tons, up 23 percent. Production of ethylene oxide, however, decreased by 6 per cent to 593,100 tons; ethylene glycol, by 9 percent to 571,400 tons; acetaldehyde, by one percent to 583,500 tons, and acrylonitrile, by 5 percent to 578,800 tons. [Text] [Tokyo KYODO in English 0411 GMT 21 Jan 80 OW]

CAPITAL INVESTMENT IN SPAIN--Tokyo Jan 21--Nissan Motor Co. has acquired a 36 percent stock ownership in Motor Iberica S.A., Spain's largest truck and farm implement manufacturer. The No 2 Japanese automaker also said that it has reached basic agreement with the Spanish Government to cooperate in rehabilitation of Empresa Nacional de Autocamiones, the second biggest truck maker in Spain. Nissan said it acquired the equity share in Motor Iberica by buying some 2.65 million shares of the Spanish firm from Massey-Ferguson Ltd. of Canada for about dollar 40 million. This makes Nissan the largest stock owner in Motor Iberica. Nissan said this is the first case of capital investments in a European nation by a Japanese automaker. [Tokyo KYODO in English 0108 GMT 21 Jan 80 OW]

PRC INVESTMENT TRUST MISSION--Tokyo 22 Jan--The Bank of Tokyo, Ltd. announced Tuesday that a three-member Chinese investment trust mission would arrive in Tokyo on January 31 mainly to exchange opinions on joint ventures. The mission from the Governmental China International Trust and Investment Corporation will be led by Chen Shuzi, deputy general manager of the corporation, the announcement said. While here until February 11, the mission is expected to pay courtesy visits to the Finance Ministry, the Ministry of International Trade and Industry, the Export-Import Bank of Japan and foreign exchange banks. The mission will also visit plants of Nippon Steel Corp., Toyota Motor Co. and Matsushita Electric Industrial Co. [Text] [Tokyo KYODO in English 1251 GMT 22 Jan 80 OW]

AID TO BANGLADESH--Tokyo 23 Jan--Japan Wednesday donated yen 600 million in grant aid to the Bangladesh Government to help modernize the country's fishing industry, the Foreign Ministry announced. Notes on the aid were exchanged in Dacca Wednesday between Japanese Ambassador Hironori Ito and A.M.A. Muhith, secretary at the external resources division of the Bangladesh Finance Ministry, it said. The Japanese aid will be used to buy engines for fishing vessels, repair tools and materials for making fishing nets necessary for the development of coastal fishing in Bangladesh where marine resources are rich, the announcement said. The ministry said that notes were exchanged also Wednesday on another Japanese grant totaling yen 38 million to finance purchase of theatrical equipment by the Bangladesh Shilpakala Academy. [Text] [Tokyo KYODO in English 1041 GMT 23 Jan 80 OW]

AID TO SUDAN--Tokyo 22 Jan--The Foreign Ministry announced Tuesday that Japan will give the Sudan materials worth up to yen 200 million for development of coastal fishing. According to notes on the aid grant exchanged in Khartoum Monday, a Sudanese Government corporation will receive small ships, engines, fishing nets, refrigerator trucks, training equipment and other materials. In addition, the ministry said, Japan will provide an aid grant of up to yen 100 million to improve the nutrition standards of mothers and infants in the Sudan. In fiscal 1978, a similar Japanese grant to that country involved powdered milk and canned fish. [Text] [Tokyo KYODO in English 0342 GMT 22 Jan 80 OW]

RICE FOR TANZANIA--Tokyo 22 Jan--The food agency announced Tuesday a plan to export 30,000 tons of polished rice to Tanzania. It will be priced at yen 73,000 per ton and payment will be made over a period of 20 years after a 10-year grace period, with a 3 percent interest per annum. Shipment will complete in mid-February. This will reduce Japan's surplus rice to 880,000 tons in fiscal 1979 ending in March against its target of 200,000 tons. [Text] [Tokyo KYODO in English 0323 GMT 22 Jan 80 OW]

OIL IMPORT TARGET--Tokyo Feb 6 KYODO--Japan is now certain to secure its oil import target totaling 281 million kiloliters in fiscal 1979 ending March 31, a senior government official said Wednesday. Speaking on the recent oil picture at a Tokyo meeting, Toshihiko Yano, vice minister for International Trade and Industry, said there is no need to worry about oil supplies for the present. The official said he believed it is not impossible for Japan to secure its oil import target of 5.4 million barrels per day in fiscal 1980 starting April 1. Even if Japan's imports in fiscal 1980 are somewhat short of the target, Japan could achieve real economic growth of about 5 per cent in the year, Yano forecast. [OW061235 Tokyo KYODO in English 1224 GMT 6 Feb 80 OW]

POLYESTER TO PRC--Osaka 29 Jan--Japan's six major textile makers have reached a basic agreement with the China National Textiles Import and Export Corporation to export about 7,500 tons of polyester staples to China in the second quarter of this year, industry sources said Tuesday. The agreement, the sources said, was reached at negotiations the companies have been holding with the Chinese corporation in Beijing since mid-January. The six firms are Toray Industries, Teijin, Toyobo, Kuraray, Unitika and Kanebo. The export amount for the April-June quarter is the same as that for the preceding quarter, the sources said. The export prices for the coming quarter, however, are 12-14 percent higher than those for the first quarter, they added, although exact contract prices were not made known. The Japanese companies pressed hard for a price increase, citing rising costs due to soaring oil prices as the major reason. At this rate, the makers' polyester staple exports to China in the whole of this year will total about 30,000 tons, about the same as in 1969. The volume represents a sharp decline from the record annual export amount of 66,000 tons registered in 1978, the sources noted. [OW291441 Tokyo KYODO in English 1035 GMT 29 Jan 80 OW]

ADVERTISING AGENCY BEIJING OFFICE--Tokyo 29 Jan--Dentsu Inc., Japan's top advertising agency, said Tuesday it would open a representative office in Beijing next month to promote business in China. Under agreements signed last March with advertising corporations in Beijing, Shanghai and Tianjin, the Tokyo-based company has already put advertisements of Japanese business firms in Chinese newspapers. It expects the establishment of the Beijing office to help it advance into Chinese television media. [Text] [OW291441 Tokyo KYODO in English 0236 GMT 29 Jan 80 OW]

PARAGUAY BOOK DONATION--Tokyo 29 Jan--The Paraguay Embassy to Japan Tuesday donated 77 documents on the politics, economics and culture of Paraguay to Japan's National Diet Library. The materials include books like "An Outline of Economics in Paraguay" (in English), President Alfredo Stroessner's message to congress (in Spanish) and a photo album titled "Paraguay." The library had so far only 20 items on Paraguay, Diet library officials added. [Text] [OW291441 Tokyo KYODO in English 0936 GMT 29 Jan 80 OW]

LOAN TO PERU--Tokyo 29 Jan--Japan will extend a yen loan totaling yen 7,591 million to Peru for improvement of harbors, roads and coastal facilities, the government announced Tuesday. Notes on the loan were exchanged Tuesday in Lima by Ambassador Hiroshi Nagasaki and Peruvian Foreign Minister Arturo Garcial Y Garcia. The loan with an annual interest rate of 4.25 percent is to be repaid in 25 years including a grace period of 7 years. With the Japanese loan, the government of Peru will purchase goods and services necessary for the implementation of various projects involved in the coastal development of that country. This brought the total amount of loans Japan has extended to Peru since 1971 to yen 35,691 million. In addition, Japan has carried out debt relief amounting to yen 1,043 million for Peru. [Text] [OW291441 Tokyo KYODO in English 0903 GMT 29 Jan 80 OW]

CAST STEEL PRODUCTION--Tokyo 29 Jan--Japan's production of cast steel in calendar 1979 totaled 680,001 tons, an increase of 9.7 percent from 1978, the Steel Casting and Forgings Association of Japan reports. Output of forged steel registered 692,504 tons, up 24.3 percent from the preceding year. Meanwhile, the monthly production of cast steel last December totaled 59,235 tons, down 1.1 percent from November but up 10.7 percent over 1 year before, while output of forged steel amounted to 61,235 tons, down 0.2 percent but up 20.4 percent. [Text] [OW291441 Tokyo KYODO in English 0536 GMT 29 Jan 80 OW]

ANGLO-JAPANESE AUTO INDUSTRY TALKS--Tokyo Jan 24--The Japanese and British automotive industries will hold a top-level conference next Tuesday at Acapulco, a seaport town in western Mexico, the Japan Automobile Manufacturers Association (JAMA) said Thursday. At the meeting, Japan will be represented by Eiji Toyoda, JAMA president. The British delegate will be Sir Barrie Heath, chairman of the Society of Motor Manufacturers and Traders Limited (SMMT), a JAMA spokesman said. The Japanese share in the British car market is expected to be the main topic. Car sales in Britain in 1979 totaled 1,716,275 units, up 7.8 percent from the previous year. Of the total, 965,909 were imported cars, up 23 percent from the preceding year. Of the imported cars, 185,084 were from Japan, up 6.1 percent from the previous year and a market share of about 10 percent, the same share as in 1978. [Text] [OW241423 Tokyo KYODO in English 1242 GMT 24 Jan 80 OW]

EAST EUROPEAN TRADE SEMINAR--Tokyo Jan 24--A seminar for better understanding of Japanese markets by East European countries will be held in Tokyo January 29-February 1, the Foreign Ministry announced Thursday. About 15 officials in charge of trade with Japan of many East European countries as well as those in their embassies in Tokyo will participate in the Tokyo meeting, Foreign Ministry officials said. The seminar is designed to promote the sound development of economic and trade relations between Japan and the East European countries, they said. [Text] [OW241423 Tokyo KYODO in English 1028 GMT 24 Jan 80 OW]

GOLD PRODUCTION--Kagoshima Jan 24--Some 600 tons of gold valued at yen 1.8 trillion may be buried underground in a mountainous area in the northern part of Kagoshima Prefecture, a veteran prospector said Wednesday. Officials of the Finance Ministry's mint bureau, who analyzed the ore samples, expressed doubts on whether ore veins containing high content of gold extended deep into the mountains. They agreed, however, that the ore was of high quality. The mint bureau officials analyzed a total of 3.5 kilograms of ore collected by Maeda from five veins and two open lodes. The officials said that checks of the ore from one of the veins showed that it contained 34.5 grams of gold per ton. They said the ore from the four other veins had a content of three to nine grams of gold. As for the ore from the open lodes, the officials found that the ratio of gold content ranged between 10.3 grams and 69.1 grams per ton. According to the prime minister's office, only 4.6 tons of gold were produced in Japan in 1977. [OW240439 Tokyo KYODO in English 0104 GMT 24 Jan 80 OW]

GAS PRICE INCREASES--Tokyo, Jan 24--Soaring prices of the key raw material butane have triggered a rush of gas rate hikes in the nation's gas supplying industry, according to officials of the Agency for Natural Resources and Energy. As of Wednesday, 104 of the nation's 249 minor gas suppliers in local areas were awaiting the government's approval for their applications for gas rate hikes ranging up to some 80 per cent, the officials said. They said the 104 suppliers do not include 48 which obtained the go-ahead for their hikes before the yearend. The remaining 97 companies are expected to follow suit soon, they said. The f.o.b. price of butane more than doubled in the past year to dollar 330 per ton, they said. The soaring butane price has already caused financial problems in the industry and they have no measures other than passing part of the cost hikes on to consumers, they said. Meanwhile, Tokyo, Osaka and Toho gas companies, the three leading suppliers catering the city areas, are also expected to seek government permission for rate hikes late this week, they added. [Text] [OW240439 Tokyo KYODO in English 0141 GMT 24 Jan 80 OW]

AID TO TANZANIA--Tokyo Jan 24--Japan will extend a grant aid totaling yen 500 million to Tanzania to furnish medical and fishery equipment, the Foreign Ministry announced Thursday. Of the sum, yen 100 million will be used for furnishing medical facilities and medicine and the remaining yen 400 million for a small fishing vessel, fishing nets and other equipment, including ice-making facilities and trucks. Notes on the Japanese assistance were exchanged Tuesday in Dar es Salaam by Japanese Ambassador Takayoshi Tsuda and Tanzanian principal secretary of the finance and planning and Ernest Abel Mulokozi, principal secretary of the Ministry of Finance and Planning of Tanzania. [Text] [OW240439 Tokyo KYODO in English 0415 GMT 24 Jan 80 OW]

LOAN TO ROK--Tokyo, 18 Jan--Japan will extend a yen loan totaling 19 billion yen to South Korea for education, medical and urban sewage disposal projects, the government announced Friday. Notes on the loan were exchanged in Seoul Friday by Ambassador Ryoze Sunobe and South Korean Foreign Minister Pak Tong-chin. Of the loan, 10 billion yen will be used for expansion of South Korea's educational facilities, 4 billion yen for modernization of medical

care and health research facilities and 5 billion yen for construction of urban sewage disposal plant. The united loan with an interest rate of 4 percent per annum is repayable in 25 years including a grace period of 7 years. [Text] [OW181303 Tokyo KYODO in English 0814 GMT 18 Jan 80 OW]

REFINING OF MEXICAN CRUDE--Tokyo, 16 Jan--The Mexican state-owned oil company, Pemex, has asked Japanese oil companies to refine Mexican crude into gasoline, kerosene and other products on a commission basis, oil industry sources disclosed Wednesday. The sources said Pemex made the proposal to oil companies not affiliated with giant western oil companies. As reasons for making the proposal, Pemex cited such factors as growing demand for oil products in Mexico and its limited oil refining capacity, according to the sources. Details of the proposal, such as the amount of Mexican crude to be refined in Japan, were not known immediately. The Japanese oil refineries involved are responding favorably to the Mexican proposal, the sources said. [OW181303 Tokyo KYODO in English 1118 GMT 16 Jan 80 OW]

GRANT AID TO MALAWI--Tokyo, 17 Jan--The government has offered a grant aid of up to 200 million yen to the Malawi Government to help it implement a water supply project in the Chitipa District in the east African country, the Foreign Ministry announced Thursday. Notes on the aid were exchanged Wednesday at Lilongwe between Japanese Ambassador to Malawi Senkuro Saiki and Malawi Finance Minister E.C.I. Bwanali, the announcement said. [OW181303 Tokyo KYODO in English 0323 GMT 17 Jan 80 OW]

AID TO PALESTINIAN REFUGEES--Tokyo, 18 Jan--The government has offered to Palestine refugees in the near east food aid up to 2.5 million dollars and 0.5 million dollars for its sea transport and insurance costs, the Foreign Ministry announced Friday. The Japanese aid, made up of Italian rice and European wheat, was offered through the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA). Notes on the aid were exchanged in Vienna Thursday between Japanese charge d'affaires to Austria Koichi Arai and Alan Brown, UNRWA acting commissioner-general, the announcement said. Japan extended the aid with a view to relieving the suffering of some 1.8 million Palestinian refugees in the area. In similar aid to the Palestine refugees, Japan contributed 4 million dollars in cash last July. [Text] [OW181303 Tokyo KYODO in English 0700 GMT 18 Jan 80 OW]

1979 INDUSTRIAL PRODUCTION UP--Tokyo Jan 31 KYODO--Japan's industrial production in calendar 1979 recorded the highest year-to-year increase since 1976 pushed by good exports and business boost in durable consumer goods, the Ministry of International Trade and Industry said Thursday. Preliminary figures released by MITI showed the 1979 index of mining and manufacturing output at 133.1 against 100 for 1975. It was up 8.3 per cent over the previous year and the second highest following the 11.1 per cent rise in 1976. MITI estimated still big rises in output index for January and February this year. The 1979 shipment index was 130.6, up 7.7 per cent from 1978, whereas inventory stood 102.7, down 0.3 percent, MITI said. Itemwise, precision instruments showed a 30.8 per cent surge last year, as well as electric appliances up 14.0 per cent, general machinery up 13.9 per cent, steel up 11.4 per cent and chemicals 9.5 per cent. But metals rose

only 1.3 per cent, oil and coal 2.4 per cent, textiles 0.7 per cent and food-stuffs 2.8 per cent, MITI said. In announcing preliminary figures for December, MITI said the seasonally adjusted index of mining and manufacturing output fell 0.3 per cent from November. Shipments also showed a decrease of 0.1 per cent. Both drops were the first in three months, it said. MITI attributed the December decreases to big drops in general machinery as a reaction to November's surge. [Text] [OW310937 Tokyo KYODO in English 0816 GMT 31 Jan 80 OW]

BROADCASTS CUT--Tokyo Jan 31 KYODO--Tokyo-based commercial television stations are all arranging "energy-saving" broadcast timetables by cutting late-night programs under government urging. The Nippon Television Network Corp. (NTV) announced Thursday it would stop broadcasting at 40 minutes past midnight Monday-Thursday, by 1 a.m. on Saturday and by 25 past midnight on Sundays, starting on March 31. On Fridays, it is likely to stop telecasting by 1 a.m. This amount of shortening its air time by seven hours and 16 minutes a week, NTV said. Currently, NTV programs last until 2 a.m. from Thursday to Saturday. Television Asahi plans to complete its programs by around half-past midnight Monday-Thursday and at least by 1 a.m. Friday-Sunday. Tokyo Broadcasting System Inc (TBS) said it is considering closing its programs on Friday and Saturday by 1 a.m., thus saving 30 minutes. The target of the Fuji Telecasting Co. (FTV) is set at ending telecasts by 1 a.m. on Friday and by half-past midnight on other days. Tokyo Channel 12 TV Ltd. will also try to cut its air time by one hour every day, thus saving seven hours a week, with its latest late-shows ending at 1:30 a.m. on Fridays and Saturdays. [Text][OW311131 Tokyo KYODO in English 1102 GMT 31 Jan 80 OW]

UNEMPLOYMENT DECLINES--Tokyo, 1 Feb--The number of unemployed in the nation in December declined 90,000 (7.8 percent) over a year ago to total 1,070,000, Director General Keizo Obuchi of the prime minister's office reported to the cabinet Friday on the basis of the monthly labor force survey. The figure was the lowest to be recorded since the 1,030,000 in November 1977. Obuchi reported that the number of workers in December totaled 39,320,000, up 760,000 (2 percent) over the same month of the previous year. He said that after seasonal adjustments, the number of workers in the construction industry rose 2.3 percent over the previous month while those in the manufacturing, wholesale-retail and service industries dropped 1 percent, 0.7 percent and 2.1 percent respectively. Obuchi also reported to the cabinet meeting that Japan's labor force working population in 1979 averaged 55,960,000, an increase of 640,000 (1.2 percent) over the previous year. He said the ratio occupied by males in the 55-59 age bracket was high at 91.9 percent, indicating that the aging process is progressing. Workers in sectors other than agriculture and forestry totaled 38,460,000, an increase of 760,000 (2 percent) over 1978. [OW010654 Tokyo KYODO in English 0010 GMT 1 Feb 80 OW]

EMPLOYMENT SITUATION IMPROVES--Tokyo, 1 Feb--The employment situation is showing a trend of improvement with an increase in job offers, Labor Minister Takao Fujinami told the cabinet meeting Friday in reporting on the employment trends in 1979. He said the effective opening-to-application ratio last year recovered to 0.71, 70 0.15 point [as received] over the

previous year. He noted an increase in job offers by firms in the manufacturing industry along with those in the service and commercial sectors. He also said more big firms employing 1,000 or more workers were seeking new workers, indicating that the severe employment situation seen since the oil crisis of 1973 had hit bottom and was recovering gradually. The Labor Ministry attributed this to the fact that employment adjustment efforts made by the enterprises had made their rounds and that business had recovered smoothly. It said, however, employment opportunities for aged persons above the age of 45 were still severe with such aged persons accounting for 43 percent of the job seekers. The survey on employment trends conducted by the Labor Ministry showed that job seekers in 1979 averaged some 1,500,000 monthly, a drop of 4.2 percent over the previous year. It was the first time in three years that a decline was registered. On the one hand, job offers were made for an average of some 1,070,000 persons monthly, up 21 percent over 1978. [Text] [OW010654 Tokyo KYODO in English 0017 GMT 1 Feb 80 OW]

TRADING FIRM COLLECTS DATA--Tokyo Feb 5 KYODO--Nichimen Co. of Osaka has launched major efforts to collect overseas data systematically for its clients by establishing a new section dealing with overseas news in its business promotion department. A spokesman for the ninth largest general trading house said that the data will cover political, economic, military and social affairs as well as international commodities. The data, coming either in English or Japanese from its 80 overseas offices, will be distributed free of charge to its clients. He said emphasis will be placed on collecting and analyzing data on the communist bloc that includes China. Lumber will be an item getting special attention as the company has traditionally excelled in getting data in this field. The overseas data will be incorporated into various researches and statistics. It will provide public relations news for a new firm established in Osaka last month. The yen 5 million firm, whose official English name is yet to be decided, is headed by Yoichiro Kikuchi, director of Nichimen. The firm, called Nichimen Research and Information Center, was established by incorporating research and public relations departments at its Tokyo and Osaka offices. The company hopes that the step will help increase its credibility among clients and lead to business expansion. [Text] [OW050845 Tokyo KYODO in English 0757 GMT 5 Feb 80 OW]

LOCAL BUDGETS GUIDELINES--Tokyo Feb 1 KYODO--The cabinet approved Friday official guidelines for local budgets in fiscal 1980 starting in April, calling for a 7.3 per cent increase over the previous year. According to the guidelines, the optimum local government budget will be yen 41.6 trillion, the second lowest growth since 6.4 per cent in fiscal 1956, a tight budget like the central government's. Revenue will include local taxes aggregating yen 15 trillion, up 16.5 per cent, and tax revenue grants to local governments totaling yen 8 trillion, up 5 per cent. Local bonds will total yen 4.4 trillion, down 9.7 per cent, resulting in slight increase in free use of funds by local public entities. An increase in tuition at public high schools and fees in kindergartens is included in the budget, tightening family budgets. In the spending plan, the subsidy from the central government is held at the same level as in fiscal 1979 but the money put in by local governments will be increased by 7.5 per cent to yen 7 trillion. [Text] [OW010342 Tokyo KYODO in English 0322 GMT 1 Feb 80 OW]

KANKEIREN DELEGATION VISITS MALAYSIA--Kuala Lumpur, 24 Jan (KYODO)--Dr. Mahathir Bin Mohamad, Malaysia's deputy prime minister and minister of trade and industry, told a visiting delegation of the Kansai Economic Federation (Kankeiren) Thursday he hoped Japanese trading firms would start joint enterprises in Malaysia for the expansion of his country's exports. He explained to the delegation touring the five members of the Association of Southeast Asian Nations (ASEAN) the direction Malaysia is following for industrialization on the basis of its rich resources. He said Malaysia must expand exports because its home market is limited, and appealed to Japanese trading firms for assistance. At present, Malaysia does not permit Japanese trading firms to start activity in its territory. The statement by the deputy prime minister was taken to reflect Malaysia's desire to use the market-surveying ability and global networks of Japanese trading firms for the development of Malaysia's foreign trade. [Excerpt] [OW241225 Tokyo KYODO in English 1124 GMT 24 Jan 80 OW]

PRC CEMENT PLANT ORDER--Tokyo, 7 Jan--A group of three Mitsubishi Enterprises, led by Mitsubishi Heavy Industries, Ltd., announced Monday the receipt of a 11 billion yen (about \$47 million) cement plant order from China. The two other members of the group are Mitsubishi Mining and Cement Co. and Meiwa Trading Co. The plant on order is a large one capable of producing 4,000 metric tons of cement a day, the announcement said. Terms call for 30 percent to be paid down and the balance in half-yearly installments over a period of five years. Half of the payments will be made in yen and the balance in U.S. dollars, the plant is expected to be built in Anhui Province by February 1984. [Text] [OW090031 Tokyo KYODO in English 1025 GMT 7 Jan 80 OW]

DREDGER TO PRC--Tokyo, 8 Jan--The 15,200-ton Hang Jun 6001, claimed to be the world's largest dredger, has been delivered to China, it was reported here today. The dredger, built by Japan's Ishikawajima-Harima Heavy Industries (IHI), has a dredging capacity of 42,000 cubic meters per hour at a depth of 12 meters. Powered by two 7,800 horsepower diesel engines for a service speed of 14 knots, the 200-meter long dredger will be used for the Shanghai port extension project, according to IHI. [Text] [Hong Kong AFP in English 0408 GMT 8 Jan 80 OW]

TRADE MISSION TO PRC--Tokyo, Jan 10--The Association for Promotion of International Trade, Japan (Kokubosoku) will send a mission to China on January 17 for wider economic interchange and trade between the two countries. The 13-member mission will be led by Shigeichi Koga, vice president of the association, and adviser to Mitsubishi Heavy Industries, Ltd. While in China until January 29, the mission will visit Beijing, Shanghai and Fuzhou. They will meet officials of the China Council for the Promotion of International Trade, Ministry of Foreign Trade, State Planning Commission, State Capital Construction Commission and State Scientific and Technological Commission. [OW101433 Tokyo KYODO in English 0607 GMT 10 Jan 80 OW]

BANK DEPOSITS INCREASE--Tokyo, Jan 10--Real deposits at the nation's 13 major commercial banks during 1979 rose by yen 3,240.6 billion for a 4.8 percent increase over the previous year, the Federation of Bankers' Associations of Japan reports. This brought the balance of real deposits at the end of last December to yen 71,324.9 billion. The amount represented a 59 percent drop compared with the increase in the preceding year. Loan outstandings last year rose by yen 3,847 billion, 6.1 percent increase over 1978. The outstanding balance of loans at the end of December totaled yen 66,630.9 billion. The amount of increase was 31 percent less than in 1978. The association said the growth rates of real deposits and loan outstandings in 1979 registered the lowest percentages as a result of measures taken by the Central Bank to reduce lendings to commercial banks. [Tokyo KYODO in English 0545 GMT 10 Jan 80 OW]

SANYO-PRC AGREEMENT--Osaka, 10 Jan--Sanyo Electric Co., Ltd., will begin this spring to entrust China to produce radios, tape recorders and light-emitting devices (LED), according to the company. Sanyo is to export all the manufactured goods to a third country through its subsidiary in Hong Kong. For this sake, China is building a new factory at an export-oriented industrial complex in Shenzhen, near Hong Kong, and accepting the machinery and the fundamental building materials from Sanyo. In return, the Chinese side is to pay back 40 percent of the entrusting commission to the company. The factory plans to start operation in May and is to produce 500,000 radios and 100,000 tape recorders in 1980. [Text] [OW100305 Tokyo KYODO in English 0121 GMT 10 Jan 80 OW]

SANYO-SHANGHAI ENTERPRISE--Osaka, 9 Jan--Sanyo Electric Co. has reached basic agreement with the Shanghai municipality to set up a joint company for the construction of a refrigerator compressor plant in the city, it was revealed Wednesday. Kaoru Iue, president of the company, made the disclosure at a news conference here. He said the proposed joint enterprise would have 10 directors, six from the Japanese firm and four from China, with a Japanese as president and a Chinese as chairman. The new company would be capitalized at about 5 billion yen, of which 75 percent would be put up by Sanyo and the balance by the Chinese. Iue said notes to that effect have already been exchanged between the two partners. Details of the project will be worked out so that Sanyo and the municipality would sign a formal agreement by about June this year, he said. The projected firm will likely be the first Japanese-Chinese joint enterprises, although Komatsu, Ltd. is preparing to build a joint foundry with the Chinese, according to informed sources. Iue said the projected compressor plant would have a production capacity of 500,000 units a year. [Text] [Tokyo KYODO in English 1218 GMT 9 Jan 80 OW]

LNG STORAGE FACILITIES--Tokyo, 8 Jan--Four Japanese companies have established a 500 million yen firm in Chita City, Aichi Prefecture, to handle the storing of liquefied natural gas (LNG). The central Japan firm, called Chita LNG Co., is owned 41 percent by C. Itoh and Co., 39 percent by Toa Oil Co., 18 percent by Chubu Electric Power Co. and 2 percent by Tao Gas Co. It started out with a staff of 60 and six LNG storage facilities, each capable of taking in 75,000 kiloliters. The new company is headed by Masaru Hamaguchi, managing director of C. Itoh. [Text] [Tokyo KYODO in English 0807 GMT 8 Jan 80 OW]

SCIENCE AND TECHNOLOGY

AUTOMAKER TO START RESEARCHES ON EUCALYPTUS OIL

Tokyo KYODO in English no time given 22 Jan 80

[Text] Tsu, Mie Pref., Jan 22 KYODO--Suzuki Motor Co., leading maker of minicars and motorcycles, revealed Tuesday it is studying the establishment of a project team to conduct researches on development of car engines using oil taken from eucalyptus trees as fuel.

Eucalyptus oil is being regarded as a promising fuel alternative.

Suzuki plans to start tests on engines using the oil next month with the cooperation of Sakuzo Takeda, professor of Mie University who is known for his researches on eucalyptus oil.

It will become the first Japanese automaker to start full-scale researches on the oil.

Eucalyptus oil came into the limelight when Dr. Melvin Calvin, an American winner of the Nobel Prize in Chemistry, announced three years ago that eucalyptus trees yield oil whose components are similar to gasoline.

Since then, researches on using the oil as an alternative for gasoline have been conducted in various countries.

Dr. Takeda also started researches on the matter and succeeded for the first time in the world last autumn in using oil taken from eucalyptus trees grown in Australia as fuel for a minicar.

In his test, he used eucalyptus oil mixed with gasoline.

He will conduct official tests for Suzuki in the future.

Suzuki plans to use one of its 550-C.C. minicars now sold on the market for the tests at a six-kilometer course in Ryuyo, Shizuoka Prefecture, from February 5.

In the tests, the time required to run the car a distance of 400 meters from the start and the top speed will be measured.

The car will be tested with two types of fuel, one in which eucalyptus oil and gasoline are mixed and the other using only eucalyptus oil.

Based on the tests, Suzuki plans to develop engines suited for eucalyptus oil.

A company official said eucalyptus oil is not only similar to gasoline but it is pollution-free.

CSO: 4120

SCIENCE AND TECHNOLOGY

S & T AGENCY REPORTS ON USE OF WASTE FOR ELECTRIC POWER

OW290837 Tokyo KYODO in English 0800 GMT 29 Jan 80 OW

[Text] Tokyo Jan 29 KYODO--Sufficient electric power for a population of 10 million could be produced with domestic wastes in Japan, a report submitted to the director general of the Science and Technology Agency said Tuesday.

The report was presented to Yuji Osada, the director general, by the resources council, an advisory organ to the director general.

It said that of the 560 billion kilowatt-hours of annual power consumption in Japan, a total of about 70 billion kilowatt-hours is accounted for by households.

Power harnessed from domestic wastes could take care of more than 10 per cent of the amount for household use, or enough electricity for 10 million people, it said.

According to the report, domestic wastes in fiscal 1975 amounted to 340 billion tons with calories equivalent to 50 billion kiloliters.

Putting the thermal efficiency at 14 per cent, 7.8 billion kilowatt-hours of electricity could be obtained from the wastes, the report said.

There are two ways to utilize energy from domestic wastes. One is to heat water or generate power at the time of incineration of the wastes and the other is to produce fuel through pyrolysis or fermentation of methane.

Some waste disposal plants are already generating power by utilizing heat produced by incineration.

The report cites the Katsushika waste disposal plant in Tokyo as the largest of such plants. It is equipped with a system capable of producing 12,000 kilowatts.

One-third of the power the plant generates is used by the plant and the rest is sold to the Tokyo Electric Power Co.

Any city with a population of 150,000 or more has enough household wastes to create electricity, the report said.

The report suggested (1) stabilizing of power supply by expanding the generating capacity and improving of thermal efficiency at the waste disposal plants, and (2) simplifying ways for local public organizations to purchase electricity from power firms.

CSO: 4120

SCIENCE AND TECHNOLOGY

MITSUBISHI PRECISION DEVELOPS TWO-AXIS GYRO

Tokyo JPE AVIATION REPORT-WEEKLY in English 16 Jan 80 p 10

[Text]

Mitsubishi Precision Co. (MPC) has developed a two-axis gyro for controlling rocket guidance and delivered a test system to the National Space Development Agency (NASDA).

The new gyro, having functions of two ordinary types, will be able to reduce the weight of a rocket used in orbiting satellites. Future demand from abroad is expected as such a gyro has not been developed except in the United States. An ordinary gyro is limited to a single axis control. However, the new gyro, called a tuned dry gyro (TDG), can be used for both longitude and latitude controls as only the center of a disc-shape rotor is fixed.

MPC hopes to sell the new gyros to NASDA after evaluation of the test system. It has monopolized orders from the Tokyo University's Institute of Space and Aeronautical Science for gyros for inertial guidance devices of its M rockets. However, gyros for NASDA's rockets have been ordered from Japan Aviation Electronic Industry Co. MPC expects its TDGs will be used for NASDA's future H rockets. It intends to increase the TDG's performance with its own technology, however, European aerospace industries are studying TDG techniques as well.

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SCIENCE AND TECHNOLOGY

BRIEFS

PREPARATION FOR SATELLITE LAUNCHING--Kagoshima Jan 28 KYODO--The National Space Development Agency launched a TT500-type rocket Monday in preparation for the launching of experimental stationary communications satellite ECS-B. The rocket, the seventh in a series, was fired from the space center on Tanegashima Island in Kagoshima Prefecture. Officials said the 9.2-meter two-stage rocket with a diameter of about 50 centimeters and weighing 2 tons was launched at 10:30 a.m. and reached a maximum altitude of 249 kilometers 4 minutes and 20 seconds later. They said the rocket descended to the sea about 450 kilometers east of Tanegashima 8 minutes and 12 seconds after it was launched. The rocket's various functions operated normally and the launching was successful, according to the officials. The rocket was fired to prepare for the scheduled launching of the ECS-B on February 5. Its purpose was to check on data communications between Tanegashima and Ogasawara, flight safety functions, and rocket tracking capabilities. [Text] [Tokyo KYODO in English no time given 28 Jan 80]

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